Pine Forge Iron Plantation:
History, Building Chronology, and Recommendations for Preservation

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(All Architectural Drawings in Appendix A and B are from John Milner Architects, Inc.)

Introduction

Pine Forge Iron Plantation is located approximately 40 miles northwest of Philadelphia, Pennsylvania. Situated in Douglass Township in southeastern Berks County the iron plantation is in the southern portion of the Oley Valley, depicted in the map in Figure 1, a distinct topographical entity known for its fertile limestone soil and agricultural prosperity.[1] The plantation's buildings are sited on a shallow rise overlooking

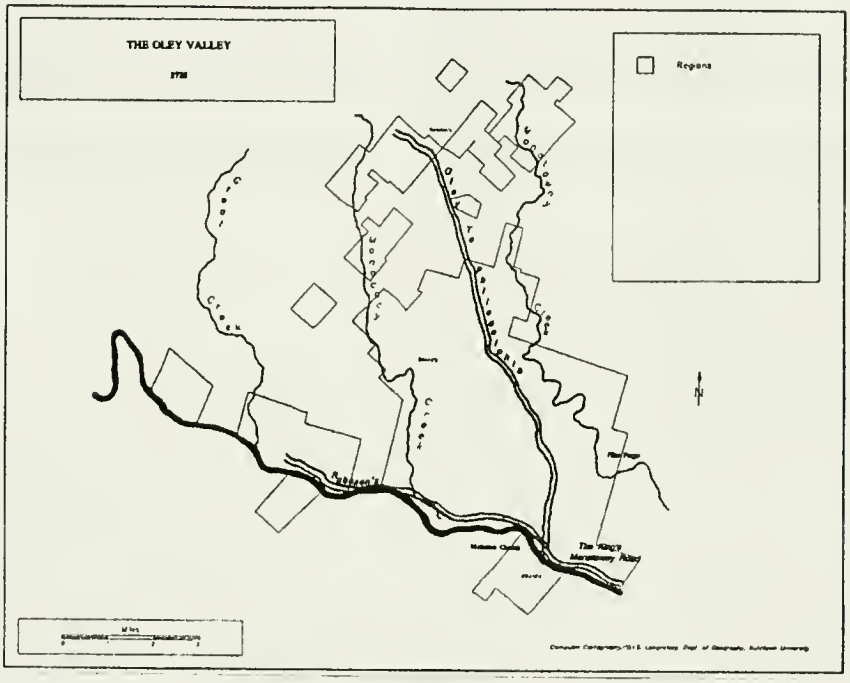

Figure 1 Map of the Oley Valley, 1725

the wooded creek bottom of Manatawny Creek. The creek, which provided the waterpower necessary for the plantation's forge, gristmill, and sawmill, is a tributary of the Schuylkill River. Throughout the 18th, 19th, and early 20th centuries, the gently rolling property was covered with hardwood woodlands, agricultural meadows, and orchards.

[1] Philip E. Pendleton, *Oley Valley Heritage: Colonial Years, 1700-1775* (Birdsboro, Pennsylvania: The Pennsylvania German Society, 1994), pg. 13.

Remnants of these features remain though the area surrounding Pine Forge Iron Plantation has been developed with individual houses, small housing developments (several of these were developed as workers housing for the forge), and the modern buildings of Pine Forge Academy and the Allegheny East Conference of Seventh Day Adventists. The boundaries of the historic iron plantation are within a larger property owned and managed by the Allegheny East Conference.

Historically, Pine Forge Iron Plantation consisted of approximately 350 acres and a varying number of buildings. Today, there are five historic buildings, several masonry ruins, and the remains of a dam and millrace. The primary complex of buildings is located

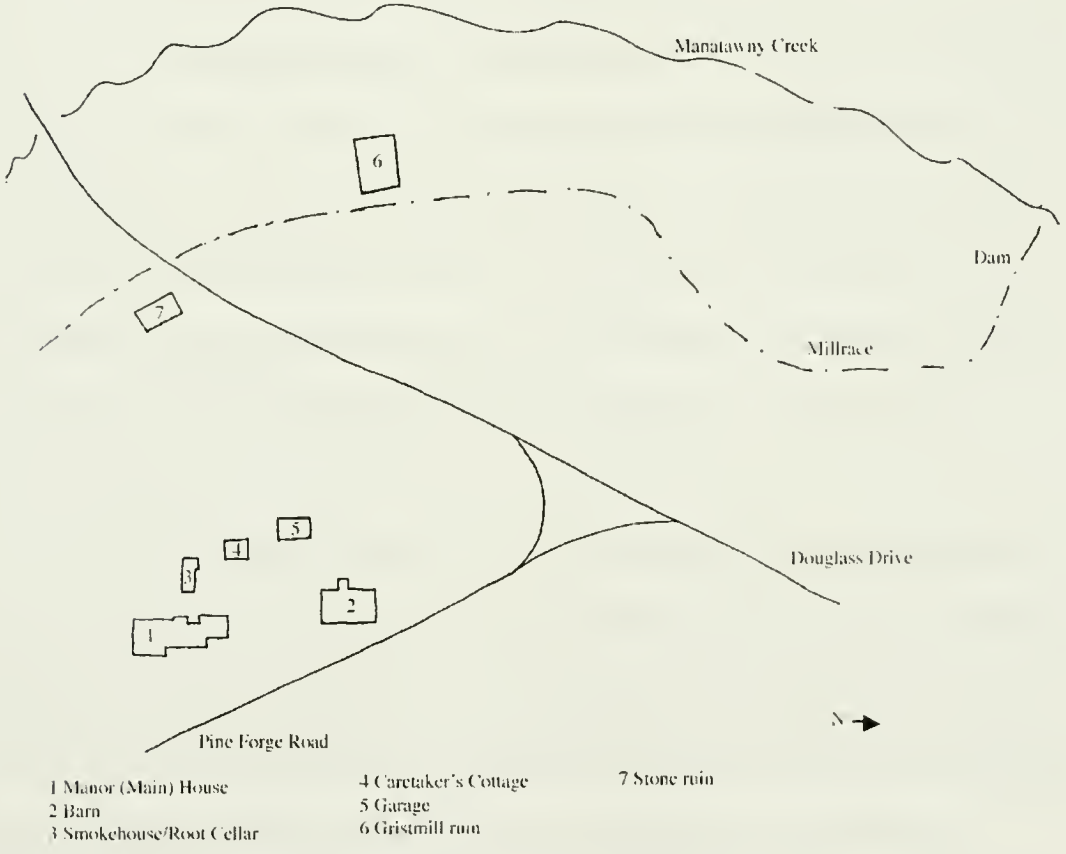

Figure 2 Sketch Map of Pine Forge Iron Plantation, 2002

on the west side of Pine Forge Road and consists of a large stone manor house, a stone barn, a small stone outbuilding, known as the "caretaker's cottage," a stone root cellar and smokehouse, and a masonry garage. At the base of the hill, running parallel to Manatawny Creek, are the remains of a millrace, which is bisected by Douglass Drive. At the head of the millrace is a large stone and soil berm, which served to dam Manatawny Creek (the present course of the creek runs beyond the western end of this feature). The stone skeleton of the plantation's gristmill is located on the east side of the millrace several hundred feet north of Douglass Drive, and another, unidentified, stone ruin is located on the east side of the millrace, just south of Douglass Drive. The location of these resources is represented in the sketch map of the property in Figure 2.

Owned by six generations of the Rutter family and three generations of the Potts family, Pine Forge Iron Plantation was an integral part of the Pennsylvania iron industry from around 1716 through the middle of the 19th century. These buildings, particularly the manor house, document the way in which the Rutter and Potts ironmasters chose to organize their domestic space and also how closely this space was intertwined with the workings of a large agricultural and industrial iron plantation – one of the first in Pennsylvania.

The Pine Forge Iron Plantation ironmaster's house and related outbuildings are historically significant for their association with Thomas Rutter, who erected the first iron forge and furnace in Pennsylvania in 1716. The property is also significant, though to a lesser extent, for its association with Thomas Rutter's descendants and the Potts family, who, as a group, expanded and developed the early iron industry in southeastern Pennsylvania. In addition, the property may have been a station on the Underground

Railroad in the 1830s and 1840s, which would make it part of an important period in American social history. Even without these other historic associations, the manor house, a fine example of rural Georgian and vernacular architecture with an addition and alterations that demonstrate the Colonial Revival work of Richardson Brognard Okie, is a significant architectural expression. There is also evidence to indicate that the center block of the main house was originally built on a "three-cell plan," which, according to Philip Pendleton, is a rare building type in the Oley Valley.[2]

The intent of this thesis is to clarify the architectural, social, and cultural history of Pine Forge by examining its evolution from the early eighteenth century to the present. This investigation is based on an analysis of archival documents, physical examination of the existing buildings, comparison with other buildings in the area, and previously written histories of the site and its owners. The architectural evidence uncovered during this investigation not only corroborates documentary evidence but also provides additional information for a broader understanding of the property's built environment.

The comprehensiveness of the historical investigation and the detail it produces can then inform and guide the preservation of this resource. The current owners of the property have begun to explore preservation options and this thesis will serve this process by providing pertinent information and offering recommendations and guidance for the preservation process. The recommendations will specifically focus on stabilization priorities, identifying deficits in information, and evaluating ways that the educational community of Pine Forge Academy could become more involved in, and benefit from, this historic resource.

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[2] Pendleton, pg. 69.

Chapter One

Pioneers in the Wilderness, 1715-1735

Undeveloped Land

The area where the Pine Forge property is located was originally part of an area northwest of Philadelphia known as the "Manatawny Region." Although it was part of Philadelphia County when first settled, the region had no distinct boundaries but encompassed Manatawny Creek and its feeder streams and included most of present upper western Montgomery County and southeastern Berks County. The region became known as Amity Township in 1720, and included all or parts of Douglass, Colebrookdale, Earl, Amity, and Oley townships in Berks County; and Douglass, New Hanover, and Pottsgrove townships in Montgomery County.[3]

The early history of the land that would be developed and named Pine Forge is difficult to document since many of the early indentures were not recorded. Most of the information related to these early property transfers has been found in the indentures recorded by Thomas Rutter between 1715 and 1720. Rutter's first purchase of property in the region occurred in 1714/15. This transfer of property is recorded in a patent from William Penn, the first proprietor and governor of Pennsylvania, and in an indenture from David Powell (also recorded as Power or Powel), who was one of Thomas Holme's deputy surveyors. The patent, which is now in the archives of the Pennsylvania Department of Internal Affairs, reads, in part, as follows:

> ...Whereas there is a certain Grant of Land situate on Mahanatawny Creek...containing Three hundred acres...by deed dated ye fourteenth day of January last past Granted and Conveyed to Thomas Rutter...I have Given,

[3] Graham, Daniel, *Pennsylvania's First Iron Work: Rutter's Bloomery, 1716-1720* (n.p., photocopy, 1992), pg. 2.

> Granted, Released & Conjoined...unto the sd Thomas Rutter the sd three hundred acres of land...with all Mines Minerals Quarries Meadowes (sic) Marshes...(these full and clear fifth parts of all Royal Mines free from all Deductions & Reprisals for diging (sic) and Refining the same only Excepted and hereby Reserved)...I have given ...ye twelfth Day of the second month (february) in this year of our Lord one Thousand Seven Hundred & fourteen (fifteen)...

The related indenture, dated "January 14th, 1714-15," records that Rutter paid Powell £45 for 300 acres located on Manatawny Creek. Like the Penn patent, this

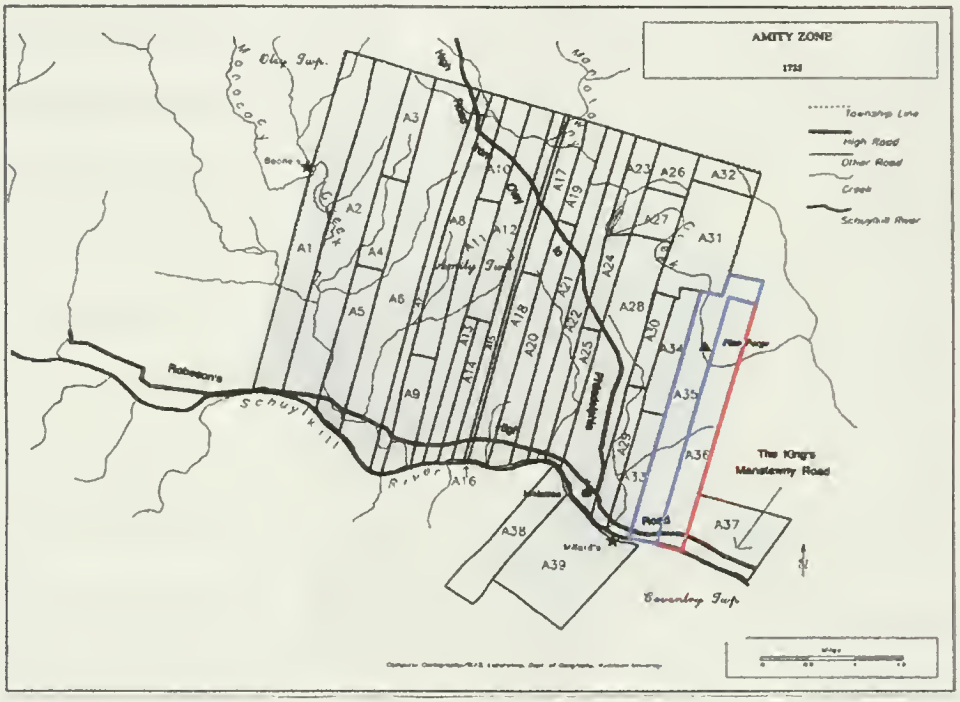

Figure 3 Map of Property Ownership in the Oley Valley, 1725

indenture gave Rutter "three full and clear fifth parts of all Royal Mines free from all deductions and Reprisals for digging & refining the same only excepted and hereby reserved…"[4] indicating that this parcel was purchased for its iron ore and that it already contained an existing mine. In May of 1715, Rutter made his second purchase, a 100-acre

[4] Indenture is quoted verbatim by Mrs. Thomas Potts James in *Memorial of Thomas Potts, Jr.* (Cambridge, Massachusetts: Privately Printed, 1874), pg. 63.

parcel from Samuel Goldy.[5] Located near but not adjacent to the first tract, it is speculated that Rutter built Pennsylvania's first ironwork on this parcel.

A map produced for Philip Pendleton's book about the Oley Valley provides information about the size and shape of landholdings in the Oley Valley in 1725, and identifies each property owner. This map is seen in Figure 3. Thomas Rutter's property is outlined in blue. The location of the forge is also noted. Thomas' son, Thomas Rutter, Jr. also owned property in the Oley Valley by this date. His property was adjacent to his father's and is outlined in red.

Figure 4 Map of the Province of Pennsylvania, 1685-1700

Thomas Rutter was a blacksmith from England who settled in Bristol Township, near Germantown.[6] The location of Rutter's property in Bristol Township is outlined in red in Figure 4. An

[5] Philadelphia County Deed Book F2, pg. 18. This 100-acre parcel was the rear portion (located furthest from the Schuylkill River) of 500 acres owned by Goldy. According to several written histories, Thomas Rutter purchased the remaining 400 acres from Goldy on June 14th, 1720.

[6] The location of this property is indicated on a map from *The Papers of William Penn, Volume III, 1685-1700*, Marianne S. Wokeck, Joy Wiltenburg, Alison Duncan Hirsch, and Craig W. Horle, editors (Philadelphia: University of Pennsylvania Press, 1986), pg. 685.

English Quaker, he married Rebecca Staples at Pennsbury Friends Meeting on October 11, 1685.[7] The location of their wedding indicates that one or both of the newly-weds worked at Pennsbury Manor, the home of William Penn. An active member and preacher at Abington Friends Meeting at the time of the birth of his first three children, Rutter later became a follower of George Keith, whose preaching, in 1691, caused a religious schism among the Quakers. After his break with the Quakers, Rutter became the Pastor of a small congregation of Keithian Baptists in Philadelphia where he preached and performed baptisms. Rutter was also politically active, serving as Bailiff of Germantown in 1705-6[8] and in the Pennsylvania Assembly in 1713, 1714/15, 1727, and 1728. Besides becoming involved in the religious controversy surrounding Keith, Thomas Rutter also spoke out against slavery by signing one of the first anti-slavery documents published in the colonies. Published in 1693, this pamphlet titled *An Exhortation & Caution to Friends concerning buying or keeping of Negroes*, outlined the many ways in which the keeping and buying of slaves was antithetical to the teachings of the Quaker religion.[9]

Thomas and Rebecca Rutter had the following children: Anne, Rebecca, Thomas, John, Mary, Martha, Hester, and Joseph. Their first child, Anne, married Samuel Savage, who was actively involved, along with Thomas Rutter, in the early iron industry. Upon her first husband's death, Anne married Samuel Nutt, founder of Coventry Ironworks, the first ironwork in Chester County, and Warwick Furnace. Thomas, John, and Joseph inherited portions of their father's property and became ironmasters. As the following

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[7] Josiah Granville Leach, *Chronicle of the Yerkes Family with notes on the Leach and Rutter Families* (Philadelphia: J.B. Lippincott, Co., 1904), pg. 228.

[8] Committee on Historical Research, *Forges and Furnaces in the Province of Pennsylvania* (Philadelphia: Pennsylvania Society of the Colonial Dames of America, 1914), pg. 12-13.

[9] Copy of this pamphlet available at the Swarthmore Friends Reference Library.

sections of this thesis will show, many generations of Thomas Rutter's descendents were involved in the iron industry.

Some historians have speculated that Rutter was encouraged, perhaps financially, to begin an iron forge by William Penn. Penn's interest in the development of Pennsylvania's iron resources is well documented, however, no evidence has been found to indicate that he took an active role in Rutter's enterprise. Still, Penn's enthusiasm for Pennsylvania's iron resources may have indirectly induced Rutter to become involved in this industry. Rutter's occupation as a blacksmith, which is how he identified himself throughout his lifetime, may provide the best evidence for how he came to be involved in the iron industry. It is possible that he, like his contemporaries, experimented with making iron in his smithy. Though this method required iron ore of the highest quality, was labor intensive and time-consuming and resulted in small outputs, it was profitable at the time. It is possible, though not documented, that he was successful in this effort and that this success, and its profitability, induced him to become more involved in iron production.

Thomas Rutter's documented involvement in the iron industry began with prospecting for iron ore. Land records of the Commissioners of Property dated January 1702 indicate that "Thomas Rutter & Company" possessed 762 acres for the prospective mining of iron ore.[10] Although it appears that the company's efforts were unsuccessful, this early attempt makes it clear that Rutter was involved in the development of the iron industry in Pennsylvania years before building its first forge. That it took Rutter over ten

[10] Leach, pg. 226.

years, from this recorded attempt to find a vein of ore to the construction of the forge indicates the difficulty of this prospect.

Construction of the Forge

Although the province of Pennsylvania was known to have the resources required for iron production – abundant iron ore, acres of woodland necessary to produce charcoal for smelting, and numerous rivers and creeks for water power – it was more than thirty years from the first Quaker settlement to the establishment of the first bloomery forge.[11] The first mention of iron production in Pennsylvania was made in 1692 when William Bradford's publication, *A Short Description of Pennsylvania* noted that at "a certain place about some forty pound" of iron had then been made.[12] While Bradford's publication indicates that iron was being produced in Pennsylvania prior to 1716 (when the first forge was erected) it is likely that this small-scale production was at the hands of enterprising blacksmiths, who worked the iron in their shop fires.[13] In 1698, Gabriel Thomas described the iron ore deposits of Pennsylvania as "far exceeding that in England" and noted "preparations have been made to carry on an iron work."[14] Like many of the early predictions made about the development of the province's iron resources, the erection of the ironwork noted by Thomas did not occur and the exploitation of Pennsylvania's vast iron resources stalled.

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[11] Arthur Cecil Bining, *Pennsylvania Iron Manufacture in the Eighteenth Century* (Harrisburg, Pennsylvania: Pennsylvania Historical Commission, 1938), pg. 26.

[12] James M. Swank, *History of the Manufacture of Iron in All Ages* (Philadelphia: Published by the Author, 1884), pg. 123.

[13] Bining, pg. 26.

[14] From Gabriel Thomas, *An Historical and Geographical Account of the Province and Country of Pennsylvania and of West New Jersey in America*, printed in London, 1698, quoted in Swank, pg. 123.

Given the slow start, it is all the more impressive that between 1716 and 1775 the Pennsylvania iron industry grew at a rate "which was not attained by any other colony in the same period."[15] By 1775, the southeastern section of Pennsylvania contained the highest concentration of forges and furnaces to be found in the country. This concentration of iron works had a profound effect on both the colonial and provincial economy. It encouraged independence from Britain by altering the supply and demand relationship between England and the colonies and established the foundations of one of Pennsylvania's greatest industries.[16] Thomas Rutter, the "first that erected an iron work in Pennsylvania,"[17] touched off this mighty economic and industrial force with the construction of Rutter's Bloomery in 1716.

Evidence for the date and general location of Rutter's endeavor is found in a letter dated from "Philada ye 5th of febury 1716/17" [1717]," in which Jonathan Dickinson describes Rutter's first forge. Dickinson, a Philadelphia merchant involved in commerce and ship building states, "expectations from the ironworks forty miles up the Schuylkill [River] are very great" and that

> this last summer one Tho Rutter a Smith who Lives not farr from Jerman Town has removed farther up in the Country & of his own Strength hath Sett upon making Iron. Such it proves to be as is highly Sett by All the Smiths here say that the best of Sweeds Iron Doth not Exceed it & we have accont of others that are going on with Iron works…[18]

Daniel Graham, who has researched and written about the Rutter and Potts families, points out that Rutter was listed as absent from the Pennsylvania Assembly for much of

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[15] Swank, pg. 142.
[16] Bining, pg. 46.
[17] *Pennsylvania Gazette*, March 13, 1730. Obituary of Thomas Rutter.
[18] Jonathan Dickinson, Letter Book 1715-1721, 5 February 1717, pg. 111-112. Historical Society of Pennsylvania.

the end of the 1714/15 legislative year and that his absence was granted for "extraordinary reasons."[19] This information and the letter referenced above are taken as evidence that by this date, Thomas Rutter had moved to the Manatawny Region and begun Pennsylvania's first forge.

According to Dickinson's letter, Rutter "of his own strength," which means, essentially, his own private financing, had begun making iron. His son-in-law, Samuel Savage, referred to in a 1716 deed as a "Manatawny mason," is believed to have assisted Rutter with the forge's construction. Rutter's grown sons, Thomas, Jr., Joseph, and John Rutter, all blacksmiths themselves, probably helped as well. According to contemporary descriptions, the forge they built was a bloomery type forge. Such an operation generally consisted of a stone hearth or fireplace, bellows operated by man, animal or waterpower, and a charcoal fire. In a bloomery, chunks of iron ore were heated on the hearth with the aid of the bellows and fire to produce a spongy mass of iron that could be refined by reheating and hammering. This type of forge was easy to erect and required only simple tools for production; however, it had limited production capabilities.[20]

The name of Rutter's first forge has been widely understood to be Pool Forge; however, this designation has confused the historic name of Rutter's first forge and its location. In *Memorial of Thomas Potts, Jr.*, Mrs. James referred to Rutter's endeavor as Pool Forge and this name was picked up and used by later researchers. While the location given by researchers for Pool Forge is correct, its connection with Thomas Rutter is not.

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[19] Daniel Graham, *Pennsylvania's First Iron Work: Rutter's Bloomery, 1716-1720* (n.p., photocopy, 1992), pg. 3.

[20] Information about this type of forge is from W. David Lewis, *Iron and Steel in America* (Greenville, Delaware: The Hagley Museum, 1976), pg. 10.

Pool Forge was located on the west side of Manatawny Creek, directly above where the Ironstone Creek enters it, but it was built by James Lewis in 1725, not by Thomas Rutter in 1716. Evidence of this can be found in the in the "Pool Forge" ledger books at the Berks County Historical Society, where the first entry is dated "1725 8mo 5day." Although Rutter was an investor in this enterprise, he did not own or manage Pool Forge. Contemporary sources indicate that Rutter's first forge was called Rutter's Bloomery or the "forge at Manatawny."[21] Its exact location is not known but current researchers believe that the forge that became known as Pine Forge was in the same, or very near, the location of Rutter's first bloomery forge.[22]

Another letter by Dickinson, dated 1719, notes that

> we had a lott of men goeing upon making of Iron they are at work at the Blumorry which doth not seem well make Iron as a furnace would yet the Iron is generally approved in England which hath been sent over and our smiths work up all the make & say it is as good as any of ye best Sweeds Iron.[23]

This statement indicates that Rutter's bloomery, for all the limitations of its type, was successfully producing high quality iron and that some of its product had been exported to England. Although it was in effect for only four years, the success of Rutter's Bloomery guaranteed that the capital investment necessary for the establishment of other

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[21] The estate inventory of Thomas Rutter (Will Number 145, 1729, Philadelphia City Archives) refers to his ownership of "one third of the 100 acres of land on which the forge at Manitam [sic] standeth." The inventory also refers to Manitawny [sic] Forge. This inventory also refers to 130 acres of land, owned by Rutter, near Pool Forge. The reference to Pool Forge does not indicate that Thomas Rutter owned it but only the land nearby.

[22] Daniel Graham, *Good Business Practices and Astute Matchmaking: The Ascendancy of Thomas Potts in the Early Charcoal Iron Industry of Pennsylvania* (n.p., photocopy, 1997), pg. 20; Linda McCurdy, "The Potts Family Iron Industry in the Schuylkill Valley" (Ph.D. diss., Pennsylvania State University, 1974), pg. 45.

[23] Jonathan Dickinson, Letter Book 1715-1721, 2 June 1719, pg. 244. Historical Society of Pennsylvania.

ironworks would be available. In this way, Rutter and his bloomery established the Pennsylvania iron industry.

Construction of Colebrookdale Furnace

Early in 1719, Thomas Rutter, trading upon his successful bloomery forge, formed a company, called "Rutter, Coates & Co.," comprised of himself, William Coates, and William Branson, two Philadelphia Quaker merchants, to finance the construction of a blast furnace and finery forge.[24] In June of 1719, he purchased 200 acres situate near Manatawny from David Powell for 24 pounds.[25] On this property, "Rutter, Coates & Co." built Colebrookdale Furnace, the first such facility in Pennsylvania. A typical blast furnace could produce larger amounts of high quality iron than a bloomery forge as well as cast-iron objects. However, pig iron produced by a furnace, while suitable for heavy containers meant to withstand heat, was not suitable for tools or other implements requiring tenacity or toughness under stress. Further processing at a finery forge was needed to convert the pig iron to the stronger wrought iron.[26] Rutter certainly understood that the furnace and finery forge combination was more productive than a bloomery, and so, once the furnace was in place he would have had no use for his bloomery forge. The technological obsolescence of the bloomery may have induced him to replace it with a finery forge, called Rutter's Forge.[27] The newly formed partnership also provided the financial backing necessary to reformulate the bloomery into a finery forge. This forge,

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[24] Graham, *Pennsylvania's First Iron Work*, pg. 9.
[25] Philadelphia County Deed Book F2, pg. 206.
[26] Lewis, pg. 14.
[27] Graham, *Pennsylvania's First Iron Work*, pg. 9; Philip Pendleton, *Oley Valley Heritage: The Colonial Years, 1700-1775* (Birdsboro, Pennsylvania: The Pennsylvania German Society), pg. 42.

subsequently rebuilt and renamed Pine Forge by the Potts family in the 1740s, would remain in continuous use until the 1840s.

The company that had financed the construction of Colebrookdale Furnace and Rutter's Forge was reorganized in 1724/25. At this time, Thomas Rutter granted a 28-year lease on the furnace and the 100 acres on which it stood to the new investors – Evan Owen, Maurice Morris, James Lewis, Robert Griffith, and Thomas Marke. Shortly after the company was reorganized, Thomas Potts began leasing the furnace and moved from Germantown to be closer to this investment. This arrangement effectively broke up the Rutter family's single-owner furnace/finery system with Colebrookdale Furnace and Rutter's Forge becoming separately managed entities.[28] Although the Rutter family still owned Colebrookdale Furnace and maintained some involvement in its day-to-day management, the Rutters appear to have shifted their focus to the management of the finery forge after 1725.

Cecil Bining notes that "…in the decades that followed the erection of Colebrookdale Ironworks [Furnace], the Manatawny Region became the scene of industry and Berks County for a time attained the industrial leadership of America."[29] This statement reinforces the assertion that Rutter, and the ironworks that he started, were integral parts of the rapidly developing Pennsylvania iron industry. It also points out how important Pennsylvania's iron production was to the industrial development of the United States.

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[28] Graham, *Good Business Practices*, pg. 23.
[29] Bining, pg. 50.

Dating the Construction of the First Dwelling

Previously written histories differ when it comes to dating the construction and identifying the builder of the first dwelling at Pine Forge. Most identify the center section of the main house as the first permanent dwelling on the property and note that it was built and occupied by Thomas Rutter. In the *Memorial of Thomas Potts, Jr.*, the author noted, "Thomas Rutter and his son-in-law Samuel Savage built and occupied, at their first coming to Manatawny, the stone house at Pine Forge."[30] William McMurtrie Rutter, a descendent of Thomas Rutter, related a similar version of this history when he stated that

> Thomas Rutter settled in 1716, hewed a log cabin from virgin timber as his home until he could erect a stone Colonial mansion...five years he lived in a small house...and in 1723 he erected a stone home, pretentious for that day.[31]

However, Philip Pendleton identifies Thomas' son, Joseph, as the builder and dates the construction to 1730.[32] Unfortunately, neither documentary nor physical evidence resolves this confusion.

If the location of the original bloomery forge was near the subsequent location of Pine Forge, then it would make sense that Thomas Rutter's first dwelling was near his first forge. This is the best evidence for Thomas Rutter living on the subject property rather than on any of his other landholdings after 1715, but it does not provide either a definitive date for, or a location for, this dwelling. Jonathan Dickinson's letter in 1717 established that Rutter had moved from his home in Bristol Township to the Manatawny Region. And the reorganization of the Furnace Company and Colebrookdale Furnace in

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[30] Mrs. James, pg. 68

[31] *Pottstown Mercury*, March 9, 1940, quoted in William Clausen, *Pioneers Along the Manatawny* (Boyertown, Pennsylvania: Gilbert Printing Company, Ind., 1968), pg. 25.

[32] Pendleton, pg. 42, 66, 70.

1725, with Thomas Potts moving from Germantown to assume its management, effectively guarantees that Rutter lived near the forge after this date. In a list of known heads of households residing in the Oley Valley, compiled by Philip Pendleton, Joseph Rutter is listed in 1729 and Thomas Rutter in 1715.[33] Therefore, each must have had a dwelling by these respective dates.

The first documented evidence for a dwelling house on the forge property occurs in a 1728 indenture in which Thomas Rutter conveyed his interest in the forge and accompanying 100 acres to his son Joseph excepting a garden and dwelling house retained for his and his wife's occupancy. The 1728 indenture was never officially recorded but it is noted in the referral clause of an indenture recorded after Thomas Rutter's death.[34] Another indenture, dated 1730, between Joseph Rutter and his mother, Rebecca, contains another exception to

> ...the Dwelling House and Garden of the said Thomas Rutter deceased which the sd Rebecca Rutter doth reserve for her own use till such time as the sd Joseph Rutter shall build her a convenient house with a chimney in it.

These references make it clear that Thomas Rutter built and lived in a dwelling at the forge sometime between 1715, when he bought the property, and 1728. Without a description of the aforementioned "dwelling house" it is impossible to know whether it consisted of what is now considered the center section of the main house.

The presence of Thomas' adult son, Joseph, at the forge property also confuses the matter. As indicated above, Joseph was living at the forge along with his parents before his father's death in 1730. Although legal right to the property was not transferred

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[33] Pendleton, pg. 177-8. The dates are the earliest that the subjects were known to have been living in the valley, or in the sons' cases the earliest they are known to have had their own households.
[34] Philadelphia County Deed BookF6, pg. 190.

to Joseph until his father's estate was settled in 1730, the unrecorded 1728 indenture indicates that this transfer was merely symbolic. Joseph, who was also a blacksmith, probably lived and worked at the forge from its establishment in 1716. Around the time of his father's death, Joseph married. Shortly thereafter, forge ledgers note that he paid "Adam Harman for building the house and barn, William Lloyd for carpentry work on the windows, shutters, doors, laying floors, and making furniture, and Garret Hingle for shingles."[35] Again, without a description there is no way to know what was built. Joseph may, as Philip Pendleton asserts, have built the center section of the main house. Alternatively, his father may have built and lived in the center section. It appears that documentary evidence is insufficient to answer this question.

It appears that there was a dwelling on the property by 1728 and that Joseph Rutter built another "house" in 1730/31. It does not appear that documentary evidence is sufficient to answer to solve this mystery. With no further evidence for another dwelling, the focus must shift to the center section of the main house, which remains and can be studied.

The Center Section of the Main House

Although the date of construction and the identity of the initial resident have been disputed, all previously written histories agree that the center section is the oldest portion of the main house. There are no known illustrations of the original appearance of this house, but the surviving evidence suggests that it was rectangular in plan and two stories in height with a side gable roof and a simple raking cornice. Thick masonry walls, pointed

[35] Graham, *Thomas Rutter and the Birth of the Pennsylvania Iron Industry*, pg. 66.

on the exterior, were constructed of native stone, likely quarried in mines owned by the Rutter family. Three chimneys protruded the roof with one at the north gable end, one just north of the building's center, and another at the southeast corner. The original configuration of the fenestration is not known although several of the windows appear to occupy their original locations. There is no evidence of a pent roof or other external feature common in the early eighteenth-century.

The principal façade faced east, away from the activity and smoke of the forge, and was distinguished from the other facades by having masonry laid in an irregular ashlar

Figure 5 East Façade of the Main House, looking west, 2001

pattern and a water table. The façade was probably arranged in three, slightly asymmetrical bays. The stonework around the current door (under the porch) appears to have been rebuilt, ruling it out as an original door location. The interrupted water table and a seam in the stonework around the window bay second from the north (right) end of the façade, as shown in Figure 5, indicates the location for another door, which may have been

an original point of access (it is possible that there was more than one entrance on the front façade).

The other three facades were laid in a coursed rubble pattern. Figure 6 shows the bricked in, rectangular opening, in the south gable-end of the attic that provides the only definitive evidence of openings on the south façade. The north façade was substantially rebuilt during the construction of the north wing, so there is no evidence of its original fenestration. The west façade, overlooking Manatawny Creek and the forge, was probably fenestrated in a manner similar to the east side of the house. Although none of the first floor windows appear to be original, the three on the second floor, though not original, appear to be the oldest on the building. None of the stonework around them appears to have been altered, they are of equal size and shape, and the wood trim around them has the same molding profile.

Figure 6 South Gable-End in the Attic of the Center Section of the house, 2002

Figure 7 shows the four types of back band molding profile found on the exterior wood casing of the manor house windows. These profiles where taken with a Molding Profile Comb, which provided a general outline of the molding. The condition of the wood and layers of paint dulls the specificity and detail of each molding but their overall

character was ascertained. Judgment about the relative age of these profiles was based on size, shape, and type of molding. The dates for these moldings are not specific but do make it clear that there were at least four different building campaigns over the life of the manor house. In some cases, like the "Type 4- c. 1918 Okie" molding profile, the date has been provided through other evidence. The location of each molding type is noted on the floor plans in Appendix B.

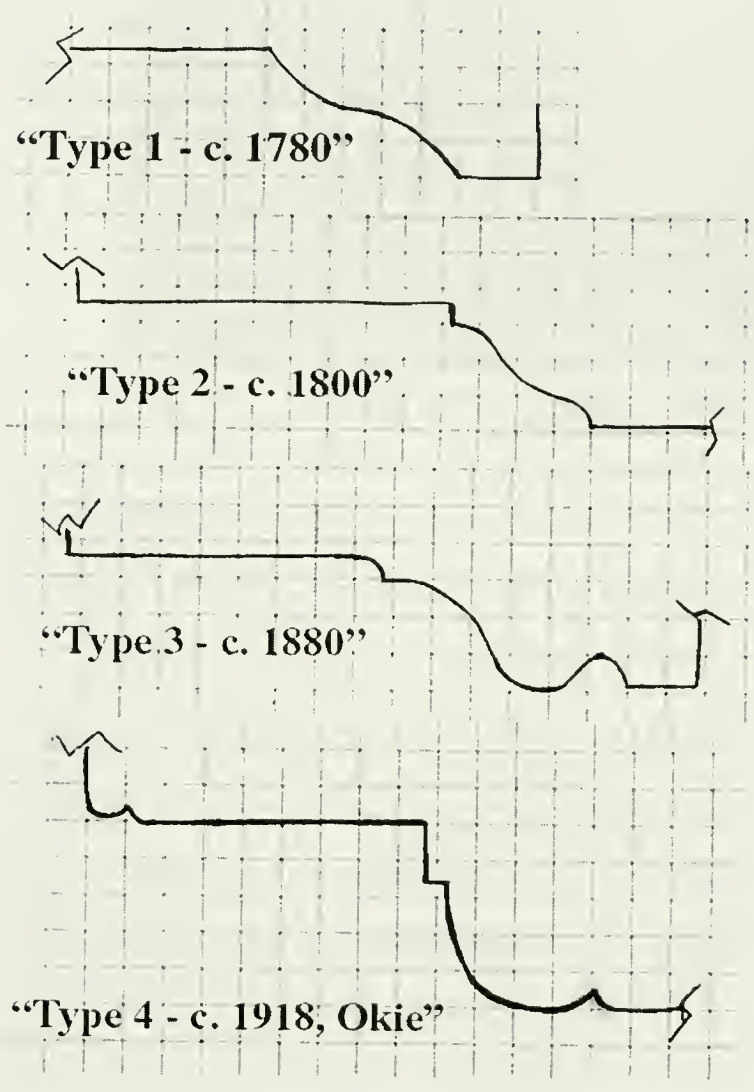

Figure 7 **Molding Profiles from Exterior Window Trim of Main House, 2002**

The side gable roof was probably covered in hand split wood shingles, a covering favored by Anglo-Pennsylvanian settlers.[36] This lightweight roof covering allowed for a simple roof system of common rafters and collar ties. Commonly constructed with mortice and tenon carpenter's joints and wooden pegs, this type of roofing system is still in place in the center section of the house as shown in Figure 8. Where masonry chimney structures protruded the roof, the rafters were generally inserted into pockets in the masonry. This appears to have been the case in the original construction of this house, with the north-most rafter resting in the chimney structure; the chimney negates the necessity for a collar tie. The south-most rafter terminates above the east sidewall; this rafter originally rested in the masonry of the corner chimney. Coupled with the triangular opening in the attic floor and the remains of the stone chimney mass, this rafter provides additional evidence for the location of an

Figure 8 **Original Rafter in Center Section of Main House, 2002**

[36] Pendleton, pg. 66.

Figure 9 Cut-off Rafter in Center Section of the Main House

original corner chimney. The rafter system also provides evidence of another original chimney location; approximately fifteen feet from the north wall, the rafters terminate several feet below the roof ridge. As one can see in the photo in Figure 9, the exposed ends of these rafters are slightly charred and scarred, which indicates that they were once embedded in a masonry chimney structure.

The original floorboards, which run north/south, also terminate in this location; further evidence that a large masonry element passed through this portion of the building. These floorboards are attached to the floor joists with rosehead nails, a hand-wrought nail type. While these nails continued to be used through the nineteenth-century, the advent of cut nails in the late 1700s relegated their use to concealed work.[37] The visibility of the

[37] Lee H. Nelson, *Nail Chronology As An Aid to Dating Old Buildings* (American Association for State and Local History Technical Leaflet 48: History News, Volume 24, No. 11, November, 1968).

nail heads and the width of the floorboards attest to the age of this flooring system. The original flooring system is also in place at the south end of the attic (the center section of flooring has been altered and will be discussed in future chapters). Besides the triangular opening in the southeast corner for the corner chimney, there is also a large square opening, shown in Figure 10, on the west side of this portion of the flooring system. Located approximately fifteen feet from the south wall, this opening abuts the west wall of the house and is approximately five feet nine inches long by five feet eleven inches wide. The size of this opening, as well as the whitewash present on the header and joists that define it, suggests that it was the location of a winder stair. Although replacement of the first floor joists and flooring has obliterated other evidence for this stair, the absence of exterior access to the basement makes it likely that this stair originally ran the height of the house.

Figure 10 Opening for original Winder Stair, 2002

Other than the passage (built in the early twentieth century) that connects the center section of the basement to the north wing of the house, the northeast quadrant of the basement has not been excavated. Resting upon the unexcavated earth is the

rectangular pointed masonry support for the north chimney. The unexcavated portion of the basement terminates in a masonry wall. This masonry wall is approximately two feet seven inches thick. Although this wall currently terminates below the first floor joists, its location and dimension corresponds perfectly with the location of the attic rafter opening and termination of the attic floorboards. These dimensions provide additional for the notion of an interior chimney mass and masonry partition wall.

Figure 11 depicts a large chunk of stone sticking out of the south side of this wall several feet above the basement floor. This may be a portion of the corbelled support for the fireplace associated with the center chimney. In the southeast corner of the basement

Figure 11 Stone Jutting from the Interior Masonry Wall in the Basement of the Center Section of the Main House, 2002

there is a large double header outlining a triangular opening in the first floor flooring and joists. While this header does not date to the original construction it does corroborate other evidence for a corner fireplace in the attic. Besides this header, pieces of the

corbelled chimney support remain keyed into the east wall and there is a void in the masonry where chimney support was removed. This can be seen in Figure 12.

Evidence that this basement dates to the original construction of the house is found in several places. First, the exposed south side of the south basement wall has a bumpy rather than smooth appearance indicating that it was originally built against earth. Second, underneath two layers of plaster in the basement of the south wing (built c. 1800) there is evidence of pointing mortar on what would have been the southwest exterior corner of the original building. These features definitively indicate that the southern and western basement walls of the center section were built prior to the south wing. The remaining foundation walls are more difficult to date. However, besides the addition of the passage to the north wing there are no seams or breaks in the walls to suggest that the footprint of the center block has been changed. Therefore, the basement appears to represent the building's original footprint.

Figure 12 **New Chimney and Disturbed Stonework in southeast corner of Basement, 2002**

Figure 13 George Boone House, photograph c. 1930

The "Three-Cell" Theory

The building's size – its external dimensions are approximately fifty-three feet by twenty feet – would surely have represented an "…imposing mansion by the local standards of the 1730s…"[38] This appearance was undoubtedly intentional, with many ironmaster's of the period commissioning large mansions meant to communicate their social status and "…proclaim to the passerby or guest that this was a man of substance."[39] Philip Pendleton, in his study of Oley Valley history notes that two early examples of such imposing mansions are the "…oldest, center section of the Joseph Rutter House at Pine Forge (1731) and the George Boone, Sr., House (1733)."[40] When

[38] Pendleton, pg. 70.
[39] Pendleton, pg. 55.
[40] Pendleton, pg. 70.

compared to the Boone House, shown in Figure 13, the center section of the Rutter House appears considerably larger, especially in its length. Philip Pendleton explains this by noting that the

> two-story, stone-built Rutter House was constructed on a plan known as a 'three-cell house,' which essentially extended the length of the single-pile hall-parlor plan by an additional room...The Rutter House is the only one of this house type known to have been built in the Oley Valley, though others have been found in areas of English-speaking settlement in southeastern Pennsylvania.[41]

The best-documented "three-cell" house is the National Historic Landmark Graeme Park; an early eighteenth-century country house located seventeen miles north of Philadelphia in Horsham, Montgomery County, Pennsylvania. Built by Governor William Keith sometime between 1722 and 1726, with internal dimensions measuring fifty-three by twenty-two feet, the original plan of the house offered three rooms in a line: a parlor, a hall with the main stair, and a kitchen with a service stair to the garret.[42] Interior chimneystacks heated all three of these rooms and the exterior elevations exhibit a controlled asymmetrical fenestration. The floor plan for Graeme Park is seen in Figure 14. In his article on Graeme Park, Mark Reinberger notes that parallels in surviving American colonial architecture are difficult to find but that in England the three-cell type has long been recognized as one of the most important house forms.[43]

Reinberger's article also presents several examples of early colonial houses that were built in a manner similar to Graeme Park. The floor plans for these homes are also shown in Figure 14. Besides Graeme Park, these homes include: the Wrights Ferry

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[41] Ibid.

[42] Mark Reinberger, "Graeme Park and the Three-Cell Plan: A Lost Type in Colonial Architecture" in *Perspectives in Vernacular Architecture, Volume IV*, edited by Thomas Carter and Bernard L. Herman (Columbia, Missouri: University of Missouri Press, 1991), pg. 150.

[43] Ibid.

Mansion in Columbia, Pennsylvania; Shoomac Park, near Philadelphia; and the Thomas Cowperthwaite house near Moorestown, New Jersey. As Reinberger notes, wealthy colonists who were recent immigrants from Great Britain built each of these examples in the late seventeenth and early eighteenth centuries.[44] Like the Rutter family, the owners of these large houses were "...persons of substance, owning large tracts of land and other sources of income such as mills, furnaces, and ferries...and were also members of the colonies' first generation and active in colonial government or community affairs."[45] There is documentary evidence that the Rutters were acquainted with Governor William Keith, who was a staunch ally of the colonial iron industry. Besides exchanging information related to early industrial trade issues, this relationship may have also reinforced an Anglo-architectural predisposition and influenced the size and footprint of the center section of the Rutter house.

By combining the information gathered from the "three-cell" floor plans described in the Reinberger article, and the physical evidence for the locations of the three chimneystacks and the winder stair, it is possible to produce conjectural basement and first floor plans, seen in Figures 15 and 16, for the original Rutter house. The interior of the center section measures forty-nine and a half feet by sixteen feet, which closely matches the interior dimensions of both the Cowperthwaite house and Shoomac Park. Like these examples, the center section of the Rutter house appears to have had three rooms in a line, with the parlor at the south end, the hall in the middle, and the kitchen at the north end.

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[44] Reinberger, pg. 151.
[45] Reinberger, pg. 153.

Based on the location of the fireplace support in the basement, the large cooking fireplace probably abutted the north wall of the house. This room certainly had an exterior door in the east wall and there may have also been another door in the west wall. Several of the other "three-cell" houses had a winder service stair in the kitchen, however, no evidence of this has been found for this house. Like the other houses, the hall in this house appears to have contained a fireplace but unlike these other examples this hall did not contain the main stair. Based on the measurements taken in the attic, the winder stair was located between the hall and the parlor of the house. Like Wrights Ferry Mansion, this stair was enclosed by a narrow stair-passage. Evidence for the framed partition walls of this passage is found in bumps on the east and west walls of the second floor and on the west wall of the first floor. Formed when the partitions were removed, these bumps correspond to the width of the winder stair and indicate that the passage spanned the width of the house on the first and second floors. The main entrance to the house probably opened into this passage, with doors to the parlor and the hall opening off of it. Like the Cowperthwaite house, the Rutter house also had a corner fireplace. It was located in the southeast corner of the parlor. Other than the locations for the fireplaces, winder stair, and stair passage, there is no evidence for the layout of the second floor.

There is little apparent evidence of original interior finishes. Whitewashed floor joists, uncovered in the attic, were once exposed features on the second floor. The ceiling of the first floor may have had a similar treatment, although it is likely that the parlor would have had a finished ceiling. The interior masonry walls were probably finished with plaster or whitewash. The bumps in the wall from the partition walls of the stair-passage also indicate that the interior of the center section was plastered. The presence of these

bumps indicates that this historic plaster survives underneath the current finish. Further investigation around the bumps on the interior walls could provide useful information about the historic appearance of the interior.

The Departure of the First Generation of Rutters

Meant to signal the wealth and status of its owner, the size and the shape of the original Rutter house reflected the tastes and aspirations of successful first generation English colonists. Regardless of whether it was built by Thomas or Joseph Rutter, the center section of the Manor House surely expressed the stature and achievements of either ironmaster. Unfortunately, neither Rutter was destined to live in the house for long. Thomas Rutter died in 1730, passing two-thirds interest in the forge and related property (including the house if built by that date) to his son, Joseph. Joseph Rutter died in 1732, leaving the property to his wife, Mary and young son, Thomas.

At the time of his death, Joseph was in possession of one-third interest in Colebrookdale Furnace and its accompanying 100 acres, two-thirds interest in the forge and its accompanying 100 acres, and one-third interest in the 100 acres adjoining the furnace property. In all, Joseph appears to have had interest in 300 acres. By this date, the 100 acres of the forge property contained the forge, a dam and millrace that supplied waterpower, at least one dwelling (the center section of the main house), a barn, and fields, orchards, gardens and meadows. There may have been additional buildings as well. After his death, his wife sold this property to Edward Farmer of Whitemarsh for £890.[46]

[46] Philadelphia County Deed Book F6, pg. 190.

Shortly after Joseph Rutter's death, Thomas and John Potts also began to purchase interest in the forge property.

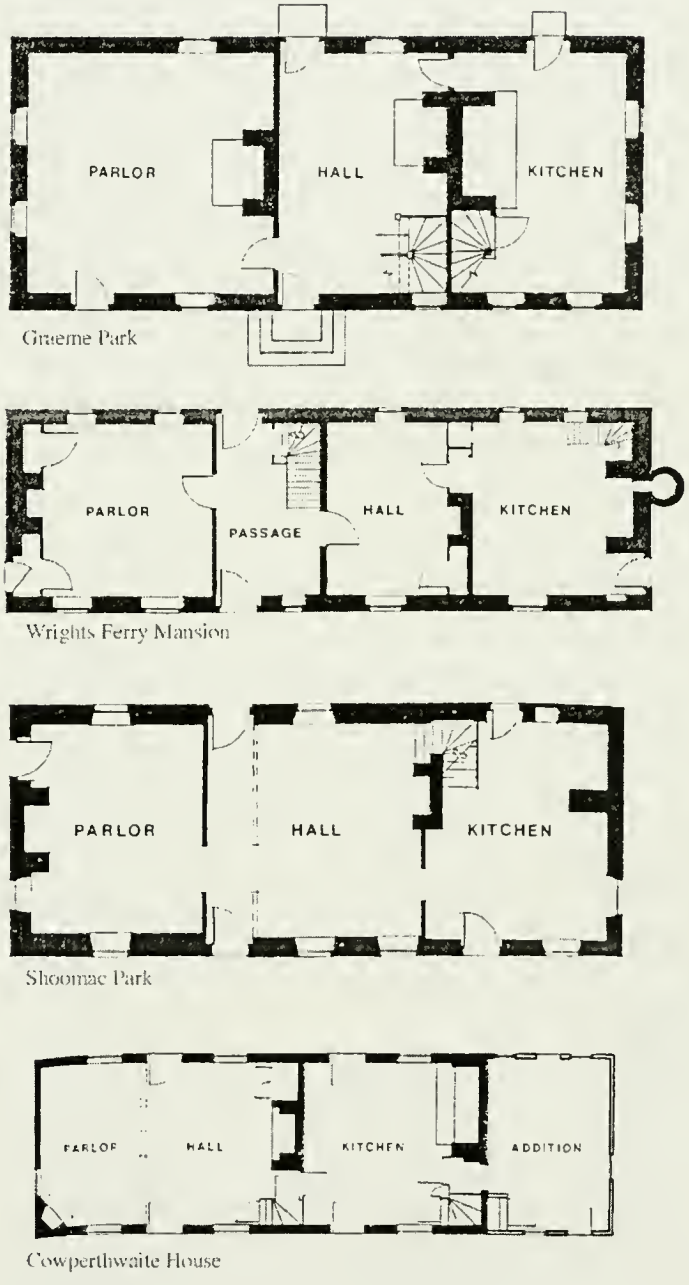

Figure 14 "Three-Cell" House Floor Plans

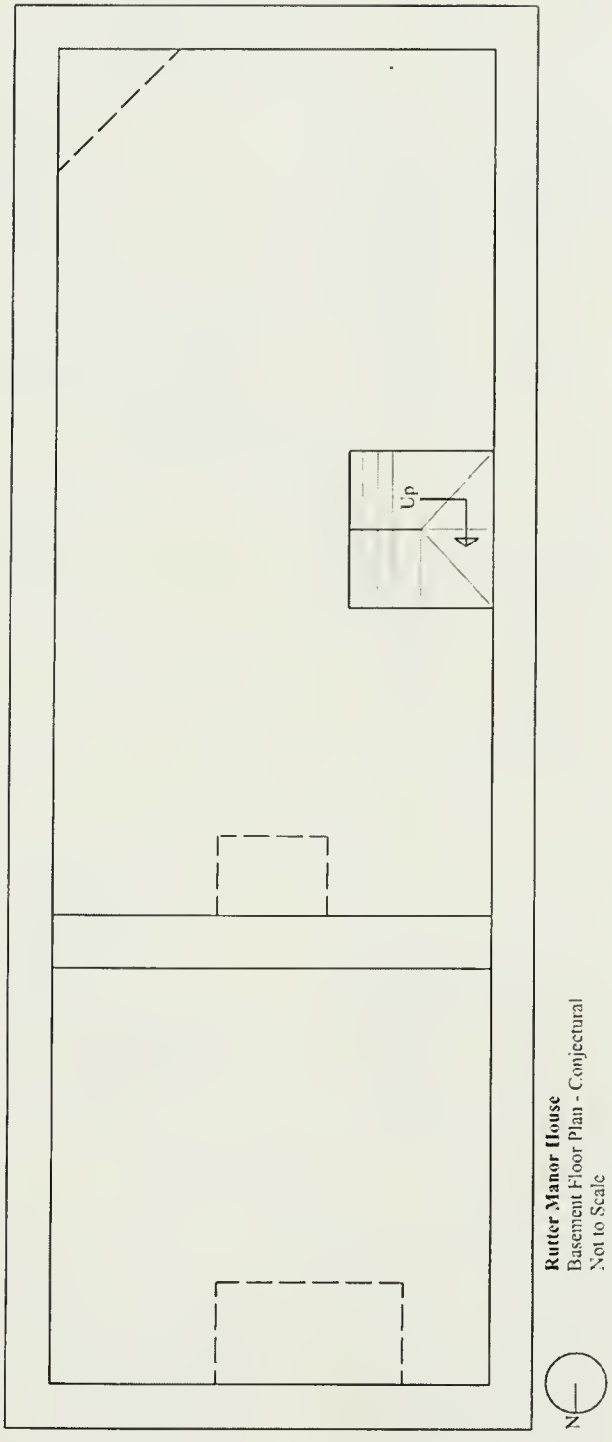

Figure 15 Conjectural Basement Floor Plan for Center Section of Main House

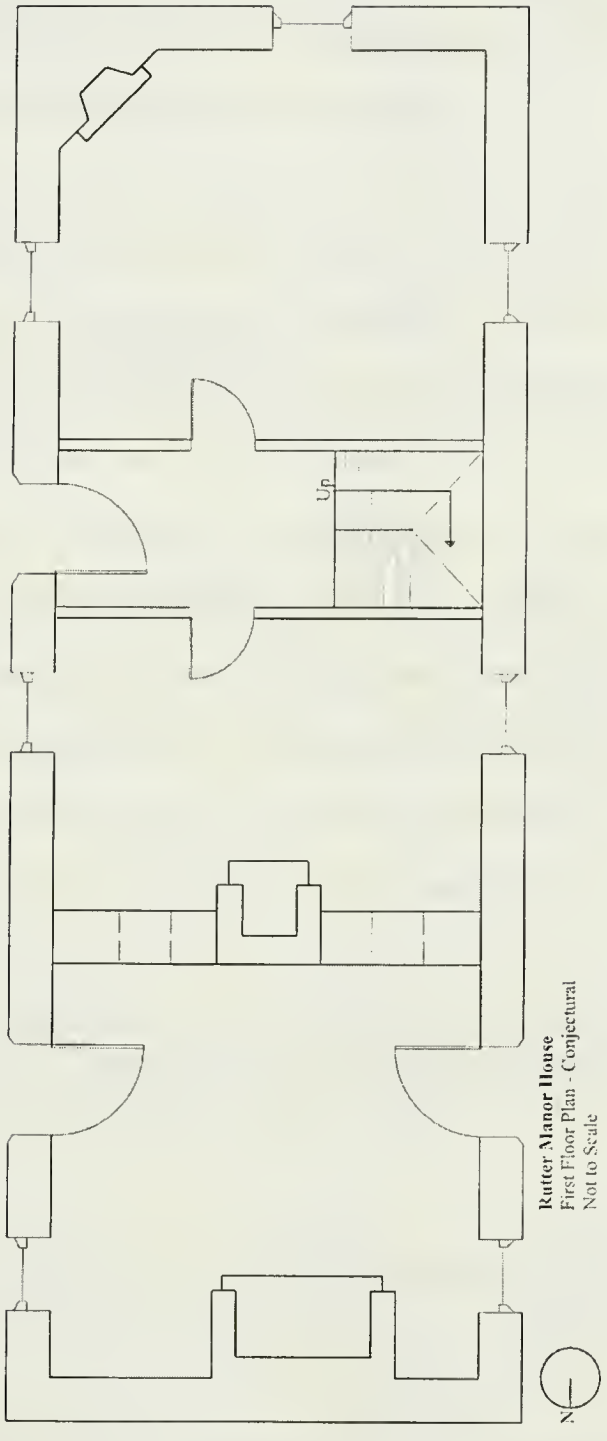

Figure 16 Conjectural First Floor Plan for Center Section of Main House

Chapter Two

Pine Forge as an Iron Plantation, 1736-1782

Thomas and John Potts, Ironmasters Extraordinaire

Thomas Potts assumed the management of Colebrookdale Furnace and began his career as in the iron industry with no prior experience. During his time in Germantown, where he lived prior to Colebrookdale, he was identified as a butcher and victualler. Early on in his lease, Potts did not actively manage the furnace, preferring instead to act merely as an on-site shareholder while he learned the business. It was not until 1733, when he is listed on an indenture as an "Iron Maker," that he begins to identify himself as an ironmaster. At around the same time, May 22, 1833, Thomas Potts purchased one-sixth of Colebrookdale Furnace and one third of the land adjoining from Edward Farmer.[47] This purchase marks the beginning of Potts emergence as one of the most influential, wealthy, and successful ironmasters of the period. According to Daniel Graham, Potts' contributions to the Pennsylvania iron industry were considerable. In Graham's words, Potts contributions were

> ...managerial and growth oriented – he developed and implemented the process to mass produce, transport and market iron products domestically...and was innovative in his use of "modern" English techniques in producing cast iron products needed by the local economy.[48]

In the twenty-seven years of his involvement in the Pennsylvania iron industry, Potts managed to assume a majority share in Colebrookdale Furnace and Pine Forge (previously

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[47] Philadelphia County Deed Book G, Volume 4, pg. 139. This is part of the two-thirds interest Farmer purchased from the estate of Joseph Rutter.

[48] Graham, *Good Business Practices and Astute Matchmaking*, pg. 11.

known as Rutter's Forge) and its ore mine as well as a share in Pool Forge. He also built Mt. Pleasant Furnace and Forge and Spring Forge.[49]

In his last will and testament, Thomas Potts gave each of his three sons the opportunity to purchase portions of his property.[50] Thomas Potts, Jr. was given the opportunity to purchase the two-thirds of Colebrookdale Furnace and Iron Mines and the 100 acres for £800. David Potts could purchase the 250-acre plantation at Colebrookdale, where Thomas Potts had lived at the time of his death, for £500. John Potts was given the opportunity to purchase the one-third of Pine Forge with the one-third of the 100 acres on which it stood and the 200 acres adjoining for £225. Thomas Potts, Jr. and John Potts accepted their father's offer and purchased these properties from his estate.

With this purchase from his father's estate, John Potts assumed complete ownership of the Pine Forge property. He had begun acquiring interest in the property along with his father in the mid-1730s. He had purchased John Rutter's one-third interest in the forge and the accompanying 100 acres in 1736,[51] and a one-sixth interest from Thomas York in 1747 (Yorke had bought this share from Edward Farmer). Until the time of his father's death, the two men managed the forge and its property as part of their extensive iron industry holdings. Figure 17, depicts the size and shape of the Pine Forge property in 1750, when it was owned and managed by Thomas and John Potts as an iron plantation. During these years, the Potts family changed the forge's name to Pine Forge and used it to process pig iron from their various furnaces.

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[49] Ibid.
[50] Last Will and Testament of Thomas Potts, January 10, 1752. Berks County Recorder of Wills.
[51] Berks County Deed Book B, Volume 2, pg. 61.

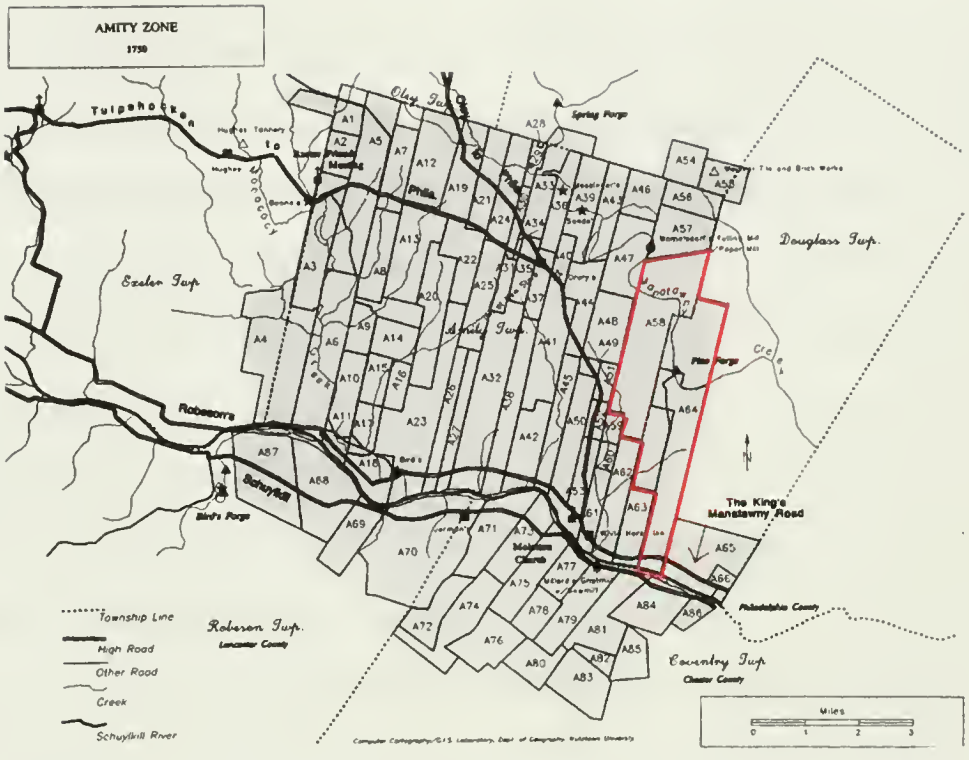

Figure 17 Map of Property Ownership in the Oley Valley, 1750

It was during the Potts ownership that the property was formerly organized as an iron plantation. Iron plantations, like southern tobacco plantations, occupied large tracts of land in relatively remote areas, produced a single product for market, employed a large force of dependent workers, and aimed at being self-sufficient communities.[52] The built environment of these properties encompassed necessary production related buildings as well as housing and, often, educational and religious facilities. On these plantations, the ironmaster and his family generally resided in a large stone or brick mansion, built on a hill, upwind from the smoky and noisy furnace or forge (as was the case with the Rutter house).[53] Besides the ironmaster's house, iron plantations usually had the following

[52] Gerald G. Eggert, *The Iron Industry in Pennsylvania* (Harrisburg, Pennsylvania: The Pennsylvania Historical Association, Pennsylvania History Studies No. 25, 1994), pg. 17.

[53] Eggert, pg. 19.

types of buildings: workers' houses, schools, churches, grist mills, barns, stores, furnace or forge office, and outbuildings such as smokehouses, springhouses and carriage sheds.[54]

At the time of his marriage to Ruth Savage, Thomas Rutter's granddaughter, in 1735, his father, Thomas Potts, had given the newly-weds a house near Colebrookdale Furnace, named Popodickon. Between 1735 and 1752 Popodickon was John and Ruth Potts primary residence. There is some evidence to indicate that John Potts may have lived at Pine Forge periodically while he built Pottsgrove Manor and established the community of Pottstown, but for most of his tenure, Potts rented the forge to various managers. The forge ledgers record a number of different managers during John Potts' ownership. Among these managers were Derrick Cleaver and Joseph Walker, Thomas Potts' sons-in-law, James Hockley, Jacob Dester, William Gilmor, Thomas May, and John Potts, Jr. These managers likely made their home in the large dwelling built by the Rutter's. There is no indication that major alterations were made to the house during this period.

At the time of his death in 1769, the Pine Forge property was just one of John Potts many iron industry holdings. He was involved in two furnaces, six forges, and owned nearly 1300 acres of land. According to Daniel Graham, John Potts

> ...expanded and enhanced his father's multi-forge production methods...and produced iron and iron products on a scale not seen elsewhere in the colonies...he died one of the richest men in the state.[55]

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[54] National Register Multiple Property Nomination, "Iron and Steel Resources of Pennsylvania, 1716-1945." Bureau of Historic Preservation, Pennsylvania Historical and Museum Commission, Harrisburg, Pennsylvania.

[55] Graham, *Good Business Practices and Astute Matchmaking*, pg. 86.

After his death in 1769, the Pine Forge property was advertised for sale and described as containing "350 acres, 25 of meadow, and about 80 upland cleared: there is on this place a forge for making iron called Pine Forge, a saw-mill, etc.; also a good stone dwelling house, workmen's houses, barn, stable, etc.; the unimproved land well timbered..."[56]

David Potts, Jr.

In 1770, David Potts, Jr., nephew of John Potts, purchased Pine Forge from his uncle's estate for £2000.[57] David and his wife lived in the manor house for fourteen years and managed the forge during the American Revolution. During those years, the couple is said to have partially rebuilt the house (this would have been the center section) and planted a large flower garden and enlarged the property's orchards.

The only documentary evidence of this period comes from tax and estate records. On the 1778 tax list, David Potts is taxed £15 on "350 acres, 200 clear and 40 in grain, 7 negros, 1 horse, 7 mares, and 12 horned cattle."[58] The estate inventory of David Potts, Jr., taken after his death in November of 1782, provides information regarding his material possessions. Although the inventory does not identify individual rooms, certain inferences can be made about the interior layout of the house based on the list of possessions.

Whereas the china, silver, and crystal are listed along with the other household furnishings,[59] the kitchen items, including cooking utensils, plates, cups, and cutlery, are

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[56] *Pennsylvania Gazette*, March 2, 1769.
[57] Berks County Deed Book 6, pg. 108.
[58] Berks County Tax Records, 1778. Historical Society of Berks County.
[59] It was common practice for these types of items to be displayed in a corner or other sort of cabinet in the parlor or prominent public room.

listed separately, suggesting that the kitchen was not located in the main house. Placing the cooking kitchen in an addition or building separate from the main house was a fairly common practice in the eighteen and early nineteenth centuries. This practice kept the

Figure 18 Manor House, looking southwest, 1872

heat and smells associated with cooking out of the main house and allowed the occupants to adapt the use of the room that had previously been used as a kitchen. A photograph of the main house taken in 1872, shown in Figure 18, depicts a small, hipped roof appendage on the north end of the center section, which could have been a kitchen addition.[60]

There are several problems with this identification, however. First, in the nearly 100 years between David Potts' ownership, and the date of the photo, many changes and additions could have been made, and there is no way to definitively date this appendage.

[60] This small structure could have been Thomas Rutter's original dwelling house, which is referred to in several of the early deeds mentioned in Chapter One.

Second, the large number of plates and cutlery listed in the inventory[61] indicates that David and Anna Potts, a childless couple, fed large groups of people. As was the practice at Hopewell Furnace, it appears that David Potts, Jr. may have provided meals for the forge workers. If this was the case, it seems that the kitchen building would have needed to be big enough to provide both cooking and dining space, and it is unlikely that the north appendage, mentioned above, would have been large enough for this purpose. Therefore, the kitchen building was probably not attached to the house. It is not known at this time where this building was located or if it is extant.[62]

With the relocation of the kitchen, the Pottses probably adapted the use of the original kitchen room. Based on an assessment of the household items listed in the inventory it appears that this room was converted into either a dining room or informal parlor. As provided by the inventory, the items that may have been located in the dining room included an "8 Day Clock, A large Looking Glass, A Mahogany Dining Table, Desk and Bookcase, Five Pictures, Breakfast Table, Six Windsor Chairs" as well as the china and silver. A set of andirons, shovel and tongs is listed below the china goods so it is likely that this room had an open fireplace.

Although it could have been located in the original kitchen, the dining area may also have been in the room previously identified as the hall. This location may make the most sense for several reasons. First, many of the items described above are items worthy of public display. If they were located in the north room of the house and the main entrance was in the hall, or center room of the house, then guests would not have

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[61] The inventory lists 23 pewter plates and two-dozen knives and forks. Inventory of David Potts, Jun., November 27, 1782. Berks County Recorder of Wills.

[62] There is no evidence that the kitchen was ever located in the basement of the main house.

automatically seen these items. Second, the types of items listed for the dining room indicates that this space would have been fairly formal. The inventory includes several items, such as an "old walnut dining table and stand" and "walnut writing desk," which were probably not meant for public display, indicating that there must have been an informal or family parlor. Based on the previous floor plan, it is possible that the original hall had become the dining room, leaving the original kitchen as an informal or family parlor.

Several items listed in the inventory were almost certainly located in the formal parlor, which was probably the south room of the house. These included, a "Case of Drawers, Dressing Table, Looking Glass, Six Mahogany Hair bottomed Chairs, Eight Mahogany Damask bottomed Chairs, Card Table." Listed just below these items is a "bed, bedstead, sacking bottom, coverlit [sic], blanket, bolster & pillows." In wealthy eighteenth-century homes, there was often an expensively draped bed in the formal parlor,[63] which provided an additional means of displaying the occupant's wealth and could also be used for company. The inventory then lists "andirons, shovel & tongs," which must have been for the corner fireplace, and a "suit of chintz curtains for a bed and three windows." Assuming that there was actually a bed in the parlor, this set of curtains makes sense and may also provide evidence for the number of windows in this room in 1782. Besides this bed, the inventory lists four other beds and bedding, another looking glass and dressing table, and two additional sets of andirons. How these and the other

[63] Elizabeth D. Garret, *At Home* (New York: Harry N. Abras, 1990), pg. 52.

items listed in the inventory might have been arranged on the upper floor of the house is unclear.

Although the inventory does not contain information about specific buildings, items appear to be listed in an order that implies they were inventoried by building. Besides the main house and kitchen building, the inventory contains items that were probably located in the forge, two barns (one for the horse teams and coal wagons and one for livestock and storage), a coalhouse, and a "barrack," which is a place where wheat and oats were apparently stored. The inventory does not mention the smokehouse, "caretaker's cottage," sawmill, dam, millrace, or workmen's houses but their apparent age, as well as other evidence, indicates that they were present on the property by this date.

Even a cursory examination of David Potts, Jr.'s inventory makes it clear that the level and accoutrements of wealth for an ironmaster had changed significantly in the fifty years since Thomas Rutter's death. Whereas Thomas Rutter's inventory indicates that the ownership of land made for approximately 77% of his personal wealth, the inventories for Joseph Rutter and David Potts, Jr., do not include their land. While both owned approximately 350 acres, the itemized inventory of their estates focuses on their household and business-related goods. While Thomas Rutter's wealth was invested in acreage, his son and David Potts, Jr. appear to have been invested in forge related tools and iron as well as grain, livestock, and agricultural equipment necessary to support themselves and their employees. This is particularly true of Potts, whose inventory not only lists two teams of horses apparently used to transport forge related items[64] but also

[64] The inventory lists "Hildebrand's Team with Coal Waggon (sic)" and "Henry Bone's Team."

numerous plows, harrows, and scythes as well as 150 loads of coal, 15 tons of hay, and 180 bushels of assorted grains. At the time of the inventory, Potts also had fifteen acres planted in wheat and fifty in rye. As a comparison, Thomas Rutter's inventory lists only one harrow and plow, six acres planted in rye, and thirty cords of wood and Joseph Rutter's inventory lists only a plow and several horses and cows. While this comparison cannot be considered either complete or fair since the standards by which estates were inventoried varied widely and many items were often excluded, it does indicate that the scale of an iron plantation and David Potts' lifestyle as an ironmaster were quite different from that of the pioneering Rutter's.

David Potts, Jr. and his wife died without adult heirs and left Pine Forge Iron Plantation to be managed and sold by their appointed executor, Samuel Potts.

Chapter Three
Abolition and Additions, 1783-1844

The Return of the Rutters

In August of 1783, Samuel Potts, grandson of Thomas Potts, advertised the property for sale. The original handbill, reprinted in the *Memorial of Thomas Potts, Jr.*, read as follows:

> TO BE SOLD…on the first day of October next, on the premises, that noted and well situated Forge, commonly known by the name of Pine Forge, in Berks County, with 359 acres of land, on half whereof is cleared and well improved, 15 acres being watered meadow of superior quality, and an excellent orchard. There are on the premises, a good stone dwelling house, barn, blacksmith's shop, coal-house, saw-mill, and convenient and necessary outbuildings for the accommodation of the workmen…and also two good teams of horses with wagons and a considerable quantity of wood and coal prepared…also all necessary utensils for carrying on the said works; household furniture, milch cows, hogs, sheep, etc.[65]

The advertisement also notes that the forge had been recently repaired and was in the "best order." The property does not appear to have sold until December of 1785 when Thomas Rutter, III, grandson of the first Thomas Rutter and Samuel Potts business partner, bought it for £3,400. Rutter promptly turned around and sold half interest in the property back to Potts for £1,800.[66] The indentures for these sales record both gentlemen as residents of New Hanover Township, Montgomery County.

These two descendants of iron industry pioneers were already in partnership on several other iron forges, including a failed attempt to resurrect Colebrookdale Furnace in the late 1760s. Tax records note that Samuel Potts was taxed for a "forge and sawmill, 8

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[65]From the original printed handbill dated August 7, 1783 published in the *Memorial of Thomas Potts, Jr.*, p. 67.

[66] Berks County Deed Book 9, pg. 464; Berks County Deed Book 9, pg. 466.

horses, and 2 cows" in 1785 and "356 acres, 1 forge and sawmill, 8 horses, and 2 cows" in 1786.[67] The entry for 1786 is under the heading, "Names of those not inhabitants of Township," an indication that Samuel Potts did not live at the property upon which the tax was levied. In 1789, the tax records include a listing for "Rutter and Potts," and levy a tax on "357 acres land, 1 forge and sawmill, 8 horses, and 2 cows."

Construction of the South Wing

David Rutter, son of Thomas Rutter, III, and great-grandson of Thomas Rutter, purchased Samuel Potts half interest in the property in 1791.[68] In this indenture both David Rutter and Samuel Potts are identified as ironmasters living in Pottsgrove (now Pottstown). There is some indication that David Rutter had assumed management of the forge prior to making this purchase but this indenture makes it clear that he had not been living at the property. It is not clear who was living on the property between 1783 and 1791. In November of 1796, David Rutter purchased the remaining half interest in the property from his father's estate for £3,400.[69]

By 1797 Rutter appears to have had serious financial trouble. In several letters between himself and Griffin Evans, regarding payment owed for a survey done by Evans, Rutter notes that while he would like to relieve the debt, he was financially unable. In a letter dated December 23, 1798, Rutter wrote Evans that he

> really expected to pay the amount of your demands against me...as that time I had plenty of water and was making a good deal of iron, but in the months of August and September the water decreased so much that I could not do half work and has been decreasing in quantity ever since and in addition to the want of water my

[67] Berks County Tax Records for 1785 and 1786. Historical Society of Berks County.
[68] Berks County Deed Book 25, pg. 436.
[69] Berks County Deed Book 15, pg. 399.

> Hammer wheel broke down by which circumstances I lost one months [sic] work in drawing iron and at this time the water is so low and the frost so severe that I cannot draw more than seven hundred weights in twenty four hours.

Drought and freshets were two of the great risk factors for water dependent local enterprises, causing economic hardship for proprietors. The financial difficulty described above may have lead to the following advertisement for the sale of the Pine Forge property. Although undated it provides an excellent description of the forge and farm:

> FOR SALE, Pine Forge and Farm…The farm contains 350 acres.... with a very capital orchard containing upwards of two hundred apple trees…The Forge has two fires, two hammers, and four pair of bellows, is in complete order, having been lately repaired, and is capable of manufacturing two hundred and forty tons of bar iron annually. Likewise, a sawmill, smith shop, two coal houses, and a sufficient number of houses to accommodate workmen, all in good order. On the premises are a two story stone dwelling house and counting house, stone barn and stables sufficient for thirty horses, a large grain barn, cow house, and every other building necessary for the use of the works and farm…apply to the subscriber on the premises, David Rutter.[70]

The description of the dwelling house matches that found in previous sale notices and indicates that this advertisement was published prior to the addition of the south wing. This advertisement, though undated, along with the financial difficulties mentioned above, provides evidence that south wing was not built prior to 1798. In addition, the inclusion of a "counting house" in the same phrase as the dwelling house may identify the small, hipped roof appendage on the north side of the center block in the 1872 photograph (Figure 18).

Further evidence for the date of the south wing's construction has been found in the forge ledgers, which record several payments made in the early 1800s to workers for "building the house." These records, the Georgian architectural details, and a survey made

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[70] *Pennsylvania Magazine of History and Biography*, Vol. 43, pg. 191.

in 1817 depicting the main house with two wings, indicates that the south wing was added between 1798 and 1817.

The south wing was a 2 1/2-story, side-hall, double-pile masonry building with a full basement and side gable roof. Like the center block, the roof was probably covered with hand split wood shingles. The thick walls were constructed of red sandstone, pointed on the exterior and plastered on the interior. A box cornice, which continued as a pent cornice at the north and south gable-ends, surrounded the building at the roof line, and two rubble-stone interior chimneys protruded the roof on either side of the roof ridge at the south gable-end. Another rubble-stone chimney protruded the north gable-end roof but it predated the new addition, which explains why it is partially exterior – the new wall of the addition was built into the south side of a pre-existing chimney. Two pedimented gable-fronted dormers protruded the east and west roof slopes. Most of the fenestration appears to be in its original location.

Like the center block, the principal façade of the south wing faced east. (See Figure 5 for its current appearance.) It was distinguished from the secondary façades by having ashlar-coursed cut sandstone and flat arch lintels over the windows. The lintels consisted of a central keystone flanked by stones with splayed ends. The façade was symmetrically arranged in three bays with five windows and a door in the north-most bay. As shown in Figure 19, the double-leaf, three-panel doors in a recessed doorway with a fanlight transom and pedimented surround are an impressive decorative feature. Wide reeded pilasters with delicate moldings and rectangular fretwork, which continue along the pediment, flank the arched reveal, which has recessed panels, fluted key block, and a quirk beaded molding decorated with an incised line pattern. The "sunburst" fanlight has

radiating muntins and lead-came spiral ornament and the entry reveals are raised panel jambs that match those of the paneled doors. The pedimented dormers mimicked the decorative details of the main entrance, with reeded pilasters supporting the pediment and an arched window surround with a quirk molding containing a key block at the top of the arch. Arched, eleven over six double-hung wood sash windows with fan-shaped lights at the head of the top sash are hung in the dormers. This window sash may or may not be original. The other windows on this wing match the shape and size of the original masonry openings but as the c. 1914 photograph shows in Figure 31, six-over-six window sash predate the twelve-over-twelve sash currently in place. The size of these window openings indicates that the six-over-six sash, which was in keeping with the fashion of the time, was the original sash configuration.

Figure 19 **Front Entrance of the South Wing of the Main House, 2001**

Red sandstone in various sizes and shapes was used in the rubble stonework of the three secondary facades. Like the front façade, the west (rear) façade, shown in Figure 20, was arranged in a 3-bay fenestration pattern, with five windows and a door. The door (also located in the north bay) was more centered on this façade in order to allow for the

Figure 20 West Façade of the South Wing of the Main House, 2001

interior stair and was probably much less decorative than the front entrance. In order to light the interior stair landing, the window above the door was placed between the level of the first and second floors. The other four windows were vertically aligned and appear to be in their original locations. To accommodate two chimney masses and an interior partition wall, the south façade had only two bays, located at either end of the façade (there was a door in the first floor left bay). There may have been a window in the gable-end. The center block took up most of the west façade, however, there was one first floor window bay in the portion of the wall that extends beyond the east wall of the earlier building.

The molding profile around most of the windows on the south wing is noted as "Type 2 – c. 1800," in Figure 7. Their appearance is in keeping with the style of the period and, with the exception of several windows added in the early twentieth century,

none of the window casings appear to have been replaced. Therefore, it appears that these window casings date to the original construction of the south wing.

Unlike the center block, the original interior layout of the south wing appears to be substantially intact. As it did originally, the first floor consists of a stair hall and two rooms. The stair hall extends the full depth of the house with a dogleg stair at the west end.[71] The staircase, which runs from the first to the third floor, retains its original configuration and decorative details. Figure 21 shows the stair; it has turned balusters and an arched rail cap, with a molded chair rail that continues along the stairwell wall as a reflected handrail and closed stringer stairs decorated with scroll brackets at each step. At the east end of the hall, the original front door is framed

Figure 21 Stair-hall in the South Wing of the Main House, c. 1938

[71] A photograph of the stair hall, published in 1938, depicts many of the features described above as well as random width wood flooring. Harold Donaldson Eberlein and Cortlandt Van Dyke Hubbard, *Colonial Interiors: Federal and Greek Revival, Third Series* (New York: William Helbern, Inc., 1938), plates 5, 25, 26, 118.

with it original arched molding with a center key block. The original chair rail and simple baseboard extends around the walls. The window on the north wall of the hall retains the original wood surround and original random-width wood floorboards remain in place under the modern carpeting. At the west end of the stair hall is the original location of the rear entrance. The door in this location has been changed. At the base of the staircase, on the north wall of the hall, is the original doorway that connects this wing to the center section of the house. Two large rooms flank the hall on the south side. The doorways to

Figure 22 First Floor East Room, South Wing of the Main House, 2001

these rooms retain their original, flaring ionic-style wood casing and original doors. These doors consist of six raised panels with mortice and tenon rails and stiles.

Each of these rooms appears to have originally had three recessed windows with raised panel reveals at the jambs and a fireplace near the center of the south wall. An opening in the partition wall connects these two rooms. This opening is framed with a wood casing like the one on the entrances from the stair hall, but the double door

currently hung in this doorway is not original. These rooms also retain the original chair rail. Figure 22 shows the fireplace and two windows on the south wall of the east room. While there was a fireplace and one window along this wall originally, the current features appear to be replacements, probably done during Okie's c. 1918 work.

Figure 23 Second Floor West Room, South Wing of the Main House, 2001

The second floor probably consisted of a stair landing and two rooms divided by a north/south partition wall. Like the first floor, these rooms had three recessed windows, with raised panel jambs at the reveals, and a fireplace along the south wall. Both of these rooms retain these fireplace and window openings, as shown in Figure 23, but the appearance of the mantelpieces and the jamb reveals on the south wall indicates that these elements are not original. The fireplace in the west room contains an undated cast iron Franklin Stove insert that probably predates the current mantelpiece. The chair rail in these rooms and the stair landing, and the paneled doors on this floor appear original.

The third floor probably had a stair landing and either two or three rooms. The baseboard, chair rail, and paneled doors on this level appear to date from the original construction. The west room had a fireplace on the south wall and was lit by one of the dormer windows on the west wall. It was separated from the east room by a north/south partition wall. Figure 24 shows the east room, which retains its original fireplace and mantelpiece, as well as a simple chair rail and eight-panel closet door with wrought iron hardware, all of which appears to be original. This photograph also depicts random-width

Figure 24 Third Floor West Room, South Wing of the Main House, no date

wood flooring on the third floor. This flooring probably dates to the original construction of this wing and was likely found throughout the house.

Figure 25 Close-up of "Palling" under the floorboards in the Basement of the South Wing of the Main House, 2002

The floor joists and summer beam in the basement appear to be original, with the joists for the hallway running north/south and those for the two other rooms running east/west. Underneath the first floor floorboards is a layer of lime mortar, known as "palling," which was a common eighteenth-century method of thermal insulation. The "palling" is held in place by a layer of boards resting on cleats, which were attached to each joist several inches below the level of the floor. Figure 25 shows these cleats and the "palling" in place in the basement. There is no interruption of the hall joists or flooring to allow for the staircase to continue to the basement. Therefore, access to this section of the basement must have been from the opening that was cut through the original south foundation wall of the center section.[72] Above this opening, the north-most floor joist of

[72] This opening appears to have interrupted the header of the corner fireplace in the center block, which may explain the presence of the double-header system currently in place.

the south wing rests on the wall, indicating that the addition was built over and around the existing south exterior wall of the center block. This explains the presence of pointing mortar under the c. 1800 plaster and the chimney that appears to be partially enveloped by the north gable-end of the south wing. Both of these elements predate the south wing and were subsumed by its construction.

The interior chimney mass in the center section of the house had been removed by the time of the 1872 photograph (shown in Figure 18). Although the exact date of its removal is unknown, it seems likely that it was removed during David Rutter's

Figure 26 Header for second generation Stair in Attic of the Center Section of the Main House, 2002

ownership. This work may have been done while the south wing was being constructed. Once the center chimney mass was removed, it appears that a straight run stair was added to the center block. The whitewashed header for this stair, seen in Figure 26, is located

five feet from the east wall and twenty and a half feet from the north wall and frames a three foot, four inch opening with a newel post at the south end of the header. The location of the framed opening indicates that it and the original chimney mass could not have existed simultaneously. Once this stair was in place, it is likely that the original winder stair was removed. How the removal of the winder stair and center chimney mass affected the layout of the interior of the house is not known, nor are these changes definitively dated to David Rutter's ownership. It is possible that these changes were made at an earlier date.

The large side-hall, double-pile house built by David Rutter would become "...one of the most common southeastern Pennsylvania types of the late eighteenth and early nineteenth centuries."[73] Combined with the original center section, which had been an imposing house in its own right, the new Rutter mansion must have been an impressive and prominent home in the area. Census records in 1790, 1800, and 1820 record the presence of between fourteen and seventeen people in the household headed by David Rutter. Rutter and his wife had eleven children, many of which are probably recorded in the census numbers. The additional inhabitants may have been servants or forge employees. In the 1790 census, one of the persons is identified as a Negro slave.

Besides the main house, tax records provide evidence for other elements of the built environment at Pine Forge during David Rutter's ownership.[74] In 1792, Rutter was taxed for 357 acres, 40 acres, 1 forge and sawmill, 18 horses, 6 cows, and 1 Negro servant. In 1802, tax was levied against David Rutter, Forgemaster for "344 acres, 46 acres, 1

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[73] Pendleton, pg. 81.
[74] Berks County Tax Records 1792, 1802, 1805. Historical Society of Berks County.

dwelling house, 1 barn, 1 grain house, 10 out houses, 1 forge, 1 cole [sic] barn, 1 sawmill, 1 smith shop, 18 horses and cows, 1 counting house." The daybook for March 17, 1804, records payment made to Jacob Bunn, Carpenter, for the "balance of account for building the house, putting up the smokehouse, windmill, etc."[75] These new buildings are then recorded in the tax record for 1805, when Rutter was taxed for "339 acres, 1 dwelling house, 1 barn, 1 grain house, 1 office, 1 smith shop, 10 tenant houses, 1 forge, 1 sawmill, 1 cole [sic] house, 17 horses, 4 cows, 1 smoke house, 1 spring house, and 60 acres of hill

Figure 27 Smokehouse/Root Cellar, looking southwest, c. 1931

land." Although not much is known about most of the buildings listed in this 1805 tax record, it seems appropriate to describe those that are extant and relate what is known about their history.

The long, low, rubble stone smokehouse/root cellar building, shown in an undated photograph in Figure 27, has a front gable, wood shingle roof and is comprised of three

[75] David Rutter Daybook. Pottstown Historical Society.

distinct sections. Although the original construction date is not known, this building is probably the "smokehouse" referred to in the 1805 tax record. This building was probably also used for storage. The east (front) section, approx. 10 feet x 12 feet, has a semi-subterranean root cellar with a smokehouse above it. The root cellar has a dirt floor and arched stone ceiling. A stone ledge projects from the walls about three feet above the floor. Access is through a centered doorway in the east wall, which is reached by stone steps descending from the north. Access to the upper floor is by stone steps that rise several feet from the south to a centered doorway and stone slab porch, which is supported by the step construction and a single wood post. A cantilevered roof overhangs the porch. An iron gong, apparently used by several generations to signal shift changes at Pine Forge, hangs precipitously from the end of the gable roof overhang on the east façade of the front section. The second section, west of the first, is 24 feet deep and 18 feet wide. This section's extra width extends beyond the north side of the first section. There is a panel door in the east wall north of the front section and two more doors along the section's north façade. On its south façade, this section has a wood frame window opening in the center and two wood frame louvered windows just below the roofline. The third (rear) section is built into the slope of the hill with the roof ending 2 to 3 feet above grade on the north façade. This section is 14 feet deep and 12 feet wide. A full-height cross gable with a doorway extends from the north side of this section. The rear sections of the building may have been added at separate times to accommodate new uses.

North of the main house is a 50' x 25', 2-story rubble stone barn (seen in the current photograph in Figure 45). According to payments recorded in the Pine Forge

Ledger book for 1731, this barn was built in that year. It was probably one of several barns on the property over the years.

Currently known as the "caretaker's cottage," the construction date and use for the 1 1/2 story, rubble stone building is unknown at this time. An 1802 tax list records a "counting house" as part of the taxable property of David Rutter and a list from 1805 records an "office." Another account, states that there was a "counting house" or "office" with barred windows[76] located near the main house. As shown in the current photograph in Figure 28, this building has several barred windows. The building also has a plain, closed wood eave and a side gabled roof that was probably covered with hand split wood shingles like the main house. An interior chimney protrudes just below the roof ridge at the southeast corner of the building.

Figure 28 Caretaker's Cottage, looking southwest, 2001

[76] M. Elizabeth Whiteacre, *A Vignette of Pine*, in W.E. Claussen, *Pioneers Along the Manatawny* (Boyertown, Pennsylvania: Gilbert Printing Company, Inc.), pg. 47.

Figure 29 Window Types on Caretaker's Cottage, 2002

The east (front) facade, which faces the rear of the main house, has a central doorway with a plain wood frame. Several windows have wood pegged frames, fixed panes, and vertical steel bars, while several others have wood pegged frames, six-over-six double-hung sash, and large wood slab shutters with an exterior iron bar that fastened from the inside to "lock" the shutter. These features are shown in Figure 29 and indicate that the building was used to store valuable goods. This building may also have served as the Commissary or Company Store for forge workers, which would have sold a variety of goods that the ironmaster would have wanted to keep secure – the Company Store would also have served as an informal bank for many of the employees (another reason for security). The building also had a large, wood frame opening, much like a hayloft opening on a barn, on the second level of the north facade (visible in Figure 28). The size of this opening suggests that the upper level of this building was used for storage. Under the modern ceiling on this level, are square-edged beaded boards nailed in place with rose-head

nails. The width of these boards and the use of rose-head nails indicate a mid-18th century construction date for this building.

The gristmill/sawmill was a large rubble-stone building with light-colored stone corner blocks. A large building with simple wood framed fenestration, this mill building is

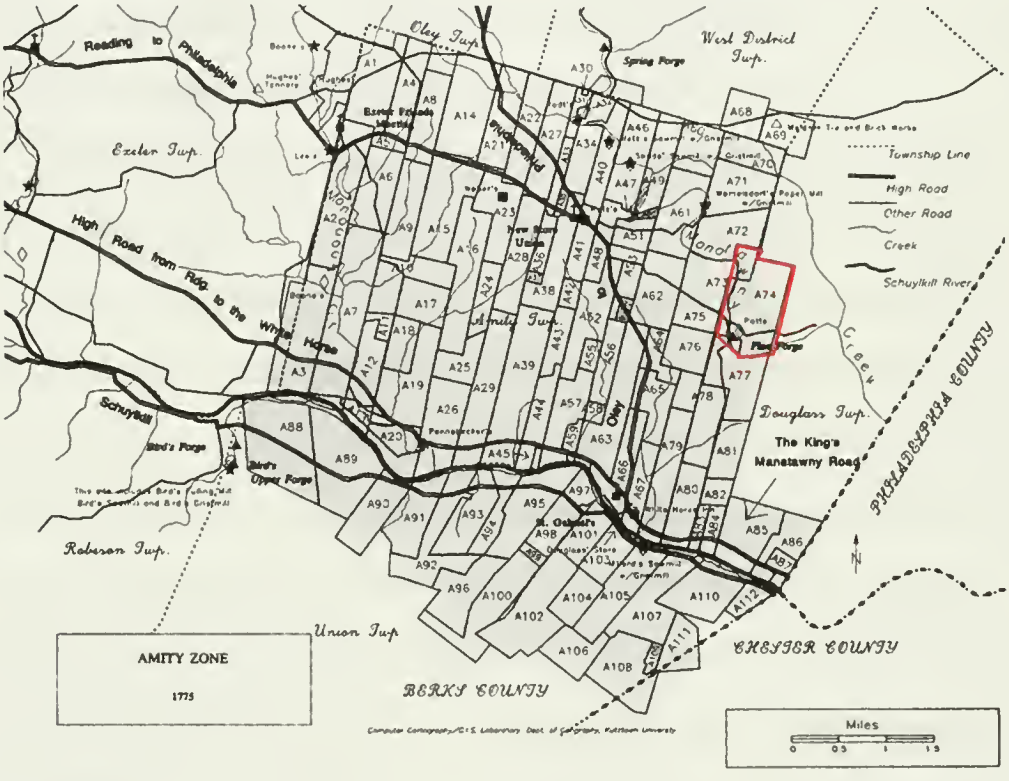

Figure 30 Map of Property Ownership in the Oley Valley, 1775

included on the 1821 survey of the property and the 1876 map of "Pine Grove (Forge) Iron Works." (These images are located in Appendix C.) The mill building is probably substantially older than this date, however, since a description of the property from as early as 1769 notes that it contains a sawmill. Figure 30 contains a map produced by Philip Pendleton to depict landholdings in the Oley Valley in 1775; this map identifies a sawmill on the property (the map also shows how the size of the property has shrunk over time). Since this sawmill was not identified on the map for 1750, it appears that this

building was built between 1750 and 1769. A sawmill remains on tax lists, survey maps, and deeds throughout the eighteenth century. Since it was common for sawmills and gristmills to share the same building or to be converted from one use to the other, it is possible that later owners converted the sawmill noted in these early records to a gristmill. Regardless, surveys of the property made in 1817 and 1821, as well as the 1876 map, mark the location of the gristmill in the same spot as its present site.

David Rutter died intestate in 1817. The survey made shortly after his death in 1817 is shown in Appendix C. This survey depicts the two wings of the house as well as the location of the "mill" and the dimensions of the property. The inventory of his estate does not itemize household furnishings, focusing instead on the rest of Rutter's property. The inventory includes a "windmill, stoves in the different workman's houses, coal in the house, two desks and a stove and pipe in the office, fifteen horses, a bull, seven cows, and two calves" and sundry items related to the working of the forge as well as agricultural implements.[77] After much legal wrangling, which is documented in voluminous Orphan's Court documents, the Pine Forge property was purchased by David Rutter's son, John Potts Rutter.

John Potts Rutter, Abolitionist

John Potts Rutter, great great grandson of Thomas Rutter, acquired Pine Forge in three separate purchases made between 1823 and 1828.[78] There is little evidence of how John Potts Rutter managed or altered the forge and related buildings. In his obituary in

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[77] Inventory of the Estate of David Rutter, June 2, 1817. Berks County Recorder of Wills Office.
[78] Berks County Deed Book 37, pg. 162; Deed Book 36, pg. 135; Deed Book 34, pg. 19.

1870, John P. Rutter was described as "one of that breed of little pioneers who, amid obloquy and reproach, proclaimed the right of every man to freedom, without distinction of race or color" and that "time itself justified his convictions, since he lived to see the free principles to which he was so warmly attached controlling the destinies of the nation."[79] This pro-abolition description of John Potts Rutter provides the best evidence in support of local oral tradition, which identifies Pine Forge Iron Plantation as a station on the Underground Railroad in the 1830s and 40s.

Due to the secretive nature of Underground Railroad activities, it is often difficult to document definitively a property's association with this important period of American social history. Most often, evidence is limited to oral histories that may have been embellished or diminished in the ensuing years of retelling. Such is the case for the Pine Forge Iron Plantation's association with the Underground Railroad. Local oral history records that several tunnels on the Pine Forge property were used to hide escaping fugitive slaves. John Potts Rutter's niece, Marielle Rutter, remembers that her father, Charles Rutter, received fugitives from the Jerome Titlow farm south of Pottstown and would conceal them in his home until they could be forwarded to his brother's home at Pine Forge. Once there, the fugitives would take shelter within the tunnels that were reached through the basement of the Manor House before continuing west to Reading.[80] Marielle Rutter's personal memory and John Potts Rutter's apparent abolitionism appear to be the primary evidence linking Pine Forge to the Underground Railroad. Thomas

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[79] *Montgomery Ledger*, Pottstown, Pennsylvania, April 19, 1870.

[80] From the turn-of-the-century memorandum of Marielle Rutter presented in William E. Claussen, *Pioneers Along the Manatawny*, 1968, pg. 39-40.

Rutter's involvement with the publication of an anti-slavery document in 1693, the employment of African Americans in the ironworks,[81] the presence of the tunnels, and the Rutter family's Quakerism have been cited as further evidence in support of the property's association with the Underground Railroad.

The tunnels noted above were apparently built by Thomas Rutter to provide protection from potential Indian attacks in the early 1700s. While there is a tunnel entrance on the property, access from the basement of the main house has been covered over (the location of this entrance is not known at this time). While Thomas Rutter did sign the 1693 anti-slavery document and apparently never owned slaves, his convictions were four generations removed from those of his great-great grandson. And, while the Quaker religion has been historically linked to the anti-slavery movement, evidence indicates that many early Quaker manufacturers and merchants, like the Potts family, did own slaves. There is also increasing evidence that the Quakers, like many other groups, were divided in their opinion about the appropriateness of aiding fugitive slaves. Therefore, the Rutter family's religion does not provide definitive evidence of abolitionist sentiment or active involvement in the Underground Railroad.

It is also unlikely that slave labor was never used at Pine Forge. In the early years of Pennsylvania's iron industry, securing skilled and unskilled labor was extremely difficult. To satisfy their labor needs ironmasters turned to involuntary workers, using many indentured men, both black and white, and slaves.[82] The use of these workers

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[81] The Pine Forge Ledger books document that several African American workers were paid for their work at the forge.

[82] Joseph E. Walker, "Negro Labor in the Charcoal Iron Industry of Southeastern Pennsylvania," *The Pennsylvania Magazine of History and Biography* XCIII (1969), 476.

allowed ironmasters to keep production costs low and to wield a certain level of control over what could be an unruly workforce.[83] Thomas Potts, John Potts, David Potts, Jr., and David Rutter, all owners of Pine Forge Plantation, owned one or more slaves.[84] Contemporary newspapers contain advertisements requesting the return of runaways; managers at Pine Forge ran several such advertisements. Entries in forge ledgers also indicate that the ironmasters paid several white employees for the labor and production of these workers own slaves, which was also common practice in the 19th century. As a counterpoint to this use of involuntary labor, there is also evidence in the Pine Forge ledgers that the forge employed free blacks as well as Native Americans.

It is difficult to assess whether the ironmaster's labor choices were primarily pragmatic or reflective of personal philosophies. As with the previously cited evidence, it is difficult to see these choices as evidence either for or against the property's possible use as a station on the Underground Railroad. Evidence of Underground Railroad activities in and around northern Chester County,[85] the property's location near the Schuylkill River, John Potts Rutter's apparent anti-slavery sentiment, and the existing tunnels, which would have provided a natural hiding place, do make Pine Forge a likely station. Future research and archaeological study of the tunnels may produce more definitive evidence for Pine Forge Iron Plantation's association with the Underground Railroad.

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[83] John Bezfs-Selfa, "Slavery and the Disciplining of Free Labor in the Colonial Mid-Atlantic Iron Industry," *Pennsylvania History* 64 (Summer, 1997), 271.

[84] Information culled from Federal Census records, contemporary sources, and the last will and testament of Thomas Potts and of John Potts.

[85] F.C. Smedley, *History of the Underground Railroad in Chester and the Neighboring Counties of Pennsylvania*, 1883. Reprint, New York: Greenwood Publishing Corp., Negro University Press, 1968.

In 1843, John Potts Rutter and his wife, Emily, set over their property to several persons, charging them to sell and absolutely dispose of all the lands, tenements and herediments, goods, chattels, etc. as soon as reasonably possible.[86] Why the Rutters did this is not clear, however, by April of 1844 the Pine Forge property had been sold by their assignees.

[86] Berks County Deed Book 49, pg. 355.

Chapter Four

The End of an Era and the Revival of History, 1844-1940

The Bailey Family

Joseph Bailey purchased the Pine Forge property in 1844 for $16,000.[87] A ledger from 1845 shows that by this date, Bailey had converted the forge into a rolling mill. Situated where Rutter's earlier forge had been, the mill's principal product was boilerplate for Union locomotives during the Civil War.[88] An 1876 map of the property (shown in Appendix C) depicts the location of this mill and several of the related buildings. A photograph taken in 1872 (shown in Figure 18) depicts the main house during the Bailey ownership. Another photograph, of unknown date but published in 1914, may also represent the appearance of the house during the Bailey occupancy. This photograph,

Figure 31 Manor House, looking west, c. 1914

[87] Berks County Deed Book 49, pg. 355.
[88] Claussen, pg. 43.

shown in Figure 31, shows a large first floor window that interrupts the water table, the hipped roof porch, and two dormers on the east roof slope of the center section of the house.

The back band molding profile of several windows on the east façade of the center block appears to date to the late nineteenth-century; this profile is identified as "Type 3 – c. 1880" in Figure 7, and it differs quite obviously from the profiles from other periods. One of the windows that bear this molding profile is located in the portion of the north wall of the center section that was covered by the hipped roof appendage depicted in the 1872 photograph. This window is shown in Figure 32. The interrupted stonework below this window also indicates that the opening was originally larger; it may have served as an interior doorway between the center section and the hipped roof north addition. The 1872 photograph and the late nineteenth century appearance of the molding profile around this window helps to date the removal of the north appendage and the

Figure 32 **North Window, Center Section of Main House, 2002**

installation of this window. The evidence indicates that Bailey made these changes between 1872, when the photograph was taken, and 1916, when the property was sold.

There is also an etched stone bearing the legend, "1858/JLB/PF," laid in the stonework around the current doorway. This may provide a date for some of the renovations made to the house by Joseph Bailey. The photograph in Figure 31 provides the best evidence for the appearance of the house after these renovations. Note the hipped roof porch and the large first floor window that interrupts the water table. It appears that the Bailey's retained the dormers on the center section of the house.

Census records in 1850 indicate that besides Joseph Bailey, eleven other people were living in the main house. These included his wife and six children, and four unrelated individuals. By the 1860 census the household had shrunk to nine people. The size of the household would continue to shrink as each of Joseph's children came of age. By 1880 only two of his children, Sarah and Hannah, were still living in the house along with two female servants and one male servant.

At his death in 1883, Pine Ironworks, as the property was then known, was divided into three parts and left to Joseph L., Sarah, and Hannah Bailey.[89] Hannah and Sarah, the grown and unmarried daughters of Joseph, were living with their father at the time of his death and retained their residence in the main house until their deaths in 1898 and 1906, respectively. The inventory of Joseph Bailey's estate provides the total value of the furniture in each room rather than as individual items. The list reads as follows,

> Furniture in kitchen, dining room, pantry, sitting room, front hall, parlor, back parlor, front bed room, back bed room, little bed room, front stairs carpet, back 3rd

[89] Last Will and Testament of Joseph Bailey, June 1883. Berks County Recorder of Wills.

story, front 3rd story, large store room, small store room, Grandfather's room, Aunt Sallie's room, Frank's room, Girls' room, contents of garret, contents of back cellar, stove under bath room, contents of main cellar.[90]

Based on this description it appears that the interior of the south wing was consistent with its original floor plan. This list also indicates that the first floor of the center block contained either three or four rooms, depending on where the kitchen was located. Based on this list of rooms, there were four bedrooms in the center section of the house. It is likely that several of these bedrooms were located in the attic. According to the 1880 census, there were two female servants and one male servant, named Franking Thompson, which surely accounts for the references to "Frank" and the "Girls" rooms. It was common for servants to be quartered in attic rooms. The desire to house people in the attic of the center block may account for the retention of the dormer windows, change in staircase, removal of the central chimney mass, and the insertion of two partition walls

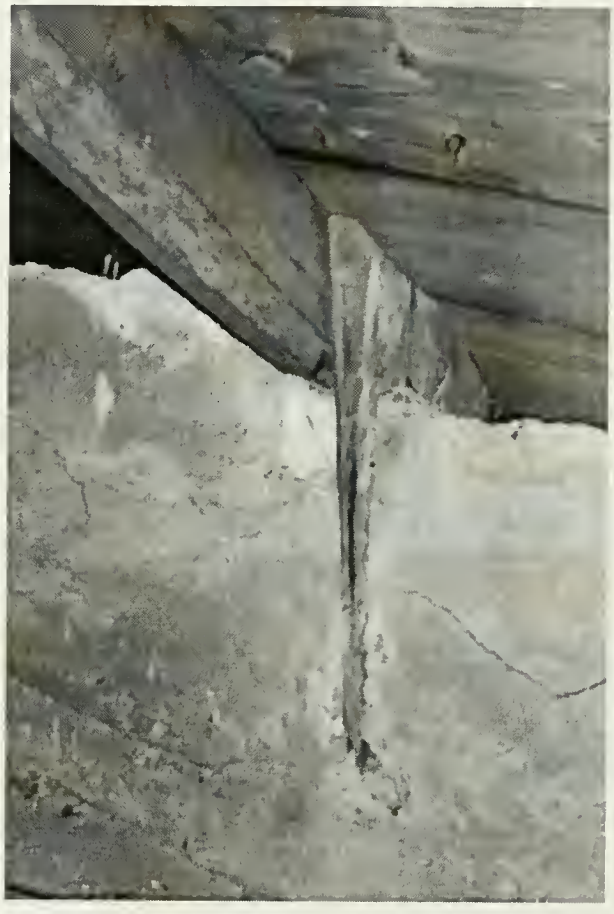

Figure 33 **Remnant of Partition Wall in Attic of the Center Section of the Main House, 2002**

[90] Inventory of the Estate of Joseph Bailey, June 8, 1883. Berks County Recorder of Wills.

that ran the width of the attic. Evidence for these partition walls remains in the remnants of the tongue-and-groove boards left in the sidewalls, as seen in Figure 33, and in the nail holes left in the roof rafters.

Although his sisters owned interest in the ironworks, Joseph L. Bailey and his cousin, Comely Shoemaker, who had been living and working at the ironworks as early as 1870, were the active managers. Sometime after 1883, the two partners tore down the rolling mill on the Pine Forge property in order to move the ironworks several miles away.[91] The new location was closer to a spur railroad line that had been built from Pottstown. The removal of the ironworks marked the end of the property's nearly 250-year involvement in the Pennsylvania iron industry.

The Return of the Rutter Family

Mary Elizabeth Rutter, a distant descendent of the first Thomas Rutter, purchased the Pine Forge property from the estate of Sarah Bailey in 1907. The indenture was for "all that certain farm or tract of land situate in Douglass Township, known as Pine Iron Works, containing 360 acres, including two large mansions, 6 tenant houses, and 1 grist mill..."[92] Although the name of the property retained its historic appellation, this indenture clearly identifies the property as a "farm" rather than an "ironworks." The location of the second mansion house noted in this indenture is not known, although it may be the house Joseph L. Bailey lived in, which is noted on the 1876 map in Appendix C.

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[91] Claussen, pg. 43.
[92] Berks County Deed Book 344, pg. 16.

Mary Elizabeth Rutter is listed as the head of household in the 1910 census, indicating that she had moved to the property from her previous home in Illinois. The census recorded her occupation as "farmer." Although the property was kept in agricultural production during her ownership, establishing a farming business does not appear to have been the motivation behind purchasing the property. Through this purchase, Mary Rutter, late widow of David Rutter (either the son or grandson of the David Rutter discussed in a previous chapter), regained a significant piece of family history. Although the forge was no longer standing, many of the other buildings her husband's ancestors had built and lived in were, and the property still represented the beginnings of the family's iron fortunes.

In 1916, Mary Rutter sold the property to her son, William McMurtrie Rutter, who was living in Winnetka, Illinois, at the time.[93] The census records for 1930 indicate that William Rutter, seven times great-grandson of Thomas Rutter, along with his wife Lucia and four children were living on the property. To honor the history of their family and the property, the Rutter's commissioned Richardson Brognard Okie to design an addition and renovations for the main house. Okie's work, circa 1918, resulted in alterations to the fenestration and detailing of the older sections of the main house and the construction of the north wing. Several years later the Rutter's also commissioned Okie to design a frame garage, and he may also have worked on several of the other outbuildings.

[93] Berks County Deed Book 455, pg. 177.

Richardson Brognard Okie

Richardson Brognard Okie received his B.S. in Architecture from the University of Pennsylvania in 1897 and over the course of his career became well known for the restoration and reconstruction of Pennsylvania colonial and vernacular building types.[94] From 1898 until his resignation in 1918, Okie was a partner in the firm of Duhring, Okie and Ziegler. After resigning from the firm, Okie worked independently until his death in 1945. The firm of Duhring, Okie and Ziegler was prominent in the Colonial Revival movement that swept the United States at the turn of the 20th century in what was termed the "ultimate 'arrival' of an American architecture."[95] The firm were leaders "in developing the early Pennsylvania country house into a modern dwelling" that was "both a home…and a polished architectural expression."[96]

The 1918 commission for alterations and additions to the William McMurtrie Rutter residence[97] was one of Okie's last commissions with the firm, and it reflects all the elements of design and restoration for which the three architects were then known. The north wing addition as well as the alterations made to the existing structure reflect the most common features of Okie's work, which include the use of undressed fieldstone, the square box cornice with pole gutters, thin gable-end bargeboards that pass unbroken by the chimney to the ridge (this effect was achieved by setting the chimney back from the

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[94] Sandra L. Tatum and Roger W. Moss, *Biographical Dictionary of Philadelphia Architects* (Boston: G.K. Hall, 1985), pg. 583.

[95] C. Matlack Price, "A Modern Version of the Early Pennsylvania Country House: Residence of William T. Harris," *The Architectural Record* 37 (January 1915), pg. 79.

[96] Price, pg. 79.

[97] Tatum and Moss, pg. 225.

wall face)[98] and "studied (yet apparently simple) moldings, very reserved, paneled shutters, quaint hardware of the period, and sincerity of feeling."[99] After leaving the partnership with Duhring and Ziegler, who both continued to practice, Okie went on to accomplish his most famous commissions. He was responsible for the restoration of the Betsy Ross House in Philadelphia, the reconstruction of William Penn's "Pennsbury Manor," and the reconstruction of High Street for the Philadelphia Sesquicentennial Exposition. His work provides insight into the early practice of historic preservation as well as the principals of one of the most notable Pennsylvania practitioners. For Okie, restorations were not done merely to produce effect but rather to approximate, as closely as possible, based on research and his understanding of historic construction methods, colonial period craftsmanship. To this end he studied and replicated colonial period details while introducing modern heating, air conditioning, lighting, and plumbing into both new and old buildings.[100]

Like many of his commissions, the main house at Pine Forge was photographed shortly after Okie completed his work. These photographs provide excellent documentation of his new addition and the exterior alterations of the existing sections of the house. Due to his detailed approach, however, it is difficult to tell which interior details predate his work. Although there are notable Okie details, the old and the new blend together harmoniously to create just the effect he must have desired – it all looks older than it probably is. In this, the main house at Pine Forge, while not one of his more

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[98] Ronald S. Senseman, Leon Brown, Edwin Bateman Morris, and Charles T. Okie, *The Residential Architecture of Richardson Brognard Okie of Philadelphia* (n.p., n.d.).
[99] Price, pg. 81.
[100] Ibid.

notable commissions, is an exemplary example of Okie's residential design at the end of his partnership with Duhring and Ziegler.

Construction of the North Wing

Around 1918, this 1 1/2-story wing was added to the original center block as servant's quarters and a laundry. Elevation drawings and correspondence archived at the Pennsylvania State Archives indicate that Richardson Brognard Okie designed this addition.[101] Additional evidence of Okie's involvement is found in the notation, "alterations and additions to the residence of William McMurtrie Rutter, Pine Forge, PA," which is included in the list of projects for 1918 by the firm of Duhring Okie & Ziegler.[102] Finally, several photographs of the Pine Forge manor house, published in *T-Square* in 1925, identify Okie as the project architect.

The Okie designed 1 1/2-story north wing, seen in Figure 34 in a photograph taken after the entire renovation of the house had been completed, is set back from the front façade of the center block. It is constructed of random-coursed stonework and has a full basement. As seen in the photograph, the new wing has an asymmetrical wood shingled side gable roof that extends as a shed roof on the west façade, a closed cornice of beaded bargeboards and an interior center chimney at its north gable-end.

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[101] Architectural Drawings for William McM. Rutter, 1917, Correspondence from Mrs. Wm. Rutter, 1917, 1928-30, and Photographs, Maj. Wm. McM. Rutter, Pine Forge, PA. From the Richardson Brognard Okie Collection, ca. 1787-1978, MG-303, Pennsylvania State Archives.

[102] Tatum and Moss, pg. 225.

Built to provide servants quarters and a laundry, this wing has no principle façade. The east facade has three bays at the first level and one small bay above. The south most bay contains a six-panel door with multi-panel reveal at the jambs and flared ionic wood casing. A rough keystone flanked on both sides by two long, thin stones caps the doorway. The north façade is asymmetrical due to the differently pitched rooflines and placement of the fenestration. There are two windows on the second floor and one window and a door on the first floor. The recessed door at the west end of the facade has a raised panel jamb reveal, a flaring ionic-style casing, and a lintel composed of slightly

Figure 34 **North and West Facades of Manor House, looking southeast, c. 1930**

arched stonework with a central keystone. The first floor window is located at the east end of the façade over the stone framed basement bulkhead. The west (rear) facade reads as a one-story building. Along this facade is an enclosed 10' porch (Okie's drawings

indicate that this was originally a screened porch) and in the wall that is offset from the porch there is a window and a door. The 4-pane beaded wood panel door had metal strap hinges and modern passage hardware. Three gabled dormers, with vertical tongue-and-groove siding, project from this roof slope. There is one window in the portion of the south façade that projects beyond the rear wall of the center section of the house.

Alterations to the Older Sections of the House

In order to connect the north wing to the center block of the house, the existing north wall was substantially reconstructed. Evidence of this reconstruction is found in the attic of the center section. In Figure 35, it is easy to see where the older plaster was left in place and where the new stonework was done. This line of plaster marks the different

Figure 35 **North Gable-End Wall in Attic of the Center Section of the Main House, 2002**

building campaigns; the stonework in the center was rebuilt but the original corners were left in place. This work certainly involved the reconstruction of the chimney at the north end of the center section (reconstructing chimney masses was a favorite Okie practice[103]), which makes it difficult to determine the location and size of the house's original cooking fireplace.

In addition to the reconstruction of the chimney and exterior wall, a portion of the originally unexcavated basement along the center section's west foundation wall was removed to connect the two basements. A section of this foundation wall, previously supported on both sides by earth, proved too weak to support the new load. To rectify this problem, the newly exposed portion of the west wall was underpinned and rebuilt with a combination of

Figure 36 **West Foundation Wall, Center Section of Main House, 2002**

[103] Senseman, Brown, Morris, and Okie, pg. 14.

stone and brick. The rebuilt wall is wider than the remaining original foundation wall, resulting in the projection noted in Figure 36. The reconstruction of this section of the wall may have removed evidence of the center section's original interior masonry partition wall. This wall would have abutted the west foundation wall right where the current projection is located. The first floor joists and flooring of the center section were also replaced at this time.

All of the exterior window trim around the windows on the north wing exhibits the same style of back band molding. This molding profile appears to be original. In Figure 7, it is identified as "Type 4 – c. 1918 Okie," and has been used to identify other windows on the Manor House that may have been added or changed during this renovation. This examination identified thirteen windows and twelve basement light wells with c. 1918 molding profiles. These window openings are highlighted on the modern floor plans provided in

Figure 37 **Post-Okie Porch, East Façade of Center Section of the Main House, c. 1930**

Appendix B. Many of these windows appear to be c. 1918 additions made to light the new interior floor plan rather than changes made to pre-existing openings.

The Okie design also added a large shed roof screened porch to the southern half of the west façade of the center block (visible in Figure 34). The same photograph also depicts a wood shingle roof with pole gutters (a common design feature of Okie's work) covering the entire house. The dormers on the center section of the house were probably removed during the construction of this new roof. The front porch of the center block was

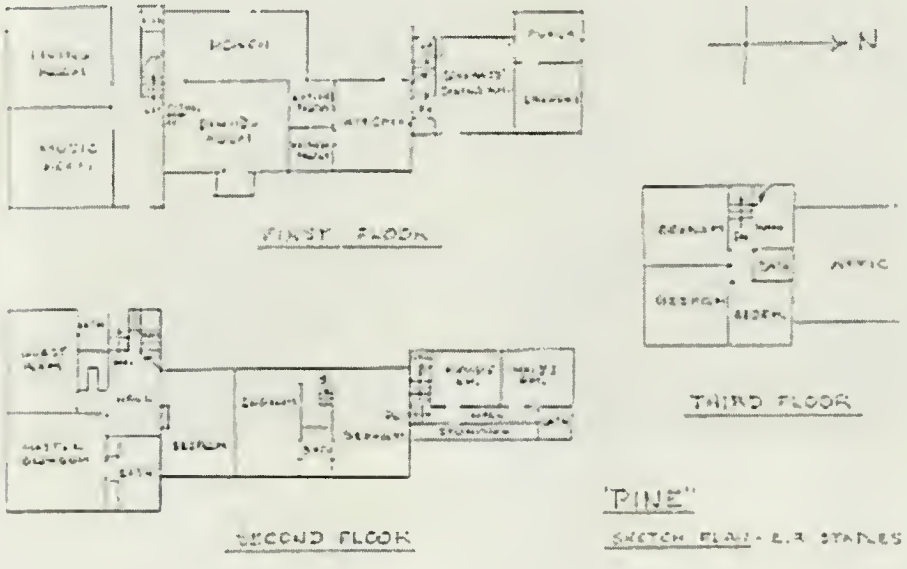

Figure 38 Manor House Floor Plan, no date

also redesigned and rebuilt at this time; see Figure 37. In addition, the exterior masonry appears to have been re-pointed.

Although undated, the "Sketch Plan" by E.R. Staples shown in Figure 38, provides the best evidence for the interior layout of the entire house after the 1918 Okie

addition and renovation. This plan shows the stair in the center section running only from the second floor to the attic. This stair appears to be located toward the western wall of the house rather than the east wall as described in a previous section. This provides evidence for dating the opening in the attic shown in Figure 39. This appears to have been the third, and last, generation of stairs in the center section of the house.

Figure 39 Third generation Stair Opening in Attic of Center Section of the Main House, 2002

Evidence for the physical appearance of the interior of the house after Okie's work, is found in several historic photographs. A photograph of the south room in the first floor of the center block, shown in Figure 40, was published in 1925 with the caption that Richardson Brognard Okie had designed alterations. This photographs depicts a wood floor and a random width, tongue-and-groove wood paneled wall around a corner fireplace with a cast iron Franklin stove insert and decorative wood surround and

mantelpiece. The fireplace insert in the photograph was cast at Warwick Furnace. The rest of the south wall, also depicted in the photograph, consisted of a built-in wood bench with hinged seat, steps leading up to the doorway into the adjoining wing, a large closet with a six-paneled door with wrought iron latch, and, in the corner, several small raised panel cupboard doors with wrought iron hardware. Other photographs, Figure 41 and Figure 42, from the same period, depict the interior of the north wing. The appearance of the mantelpiece, fireplace, and jamb reveals of the windows on the south wall of the first floor east room of the south wing (shown in Figure 22) is representational of interior work done by Okie. The jamb reveals and built-ins around the windows in the other room on first floor, and around the windows in the south wall of the second and third floors also indicate changes made by Okie.

Figure 40 Second Floor South Room, Center Section of Main House, 1925

Figure 41 **Second Floor Hall, North Wing of Main House, c. 1930**

Figure 42 **Stair and Rear Entrance, First Floor of North Wing, c. 1930**

Other Buildings

According to correspondence found at the Pennsylvania State Archives, Richardson Brognard Okie designed a garage for the property in the late 1920s. This 24' x 14', one story, side gable building was constructed of masonry block and had side swinging doors on the south façade. The building was clad with vertical German siding and rested on a pre-existing stone foundation. This foundation appears to date to the older sections of the main house. The 1876 map of the Pine Grove (Forge) Ironworks (shown in Appendix C) depicts a barn in this location and it appears that the modern garage was built over the remains of this earlier building.

There is little information regarding the other buildings during William McMurtrie Rutter's ownership. The appearance of the smokehouse/root cellar building is represented in a photograph published in 1931 (shown in Figure 27). The appearance of the building in this photograph relates to the Okie aesthetic of the main house but there is no additional evidence to prove

Figure 43 **West Façade of Main House and South Façade of Barn, c. 1930**

that Okie was involved in renovating this building. The date, July 17, 1919, is inscribed in the cement of the interior slope of the chimney in the "Caretaker's Cottage," indicating that renovations were made to this building during William Rutter's ownership, however, the extent of this work is not known. Greek Revival interior finishes in the building also indicate alteration. A photograph of the west façade of the main house, taken in the 1920s and seen in Figure 43, also shows the south façade of the barn.

The Rutters Depart

William McMurtrie Rutter, the last Rutter descendent to own the Pine Forge property, sold it in August 1940 to Thomas Snyder.[104] At the time of the sale the historic Pine Forge tract was just one part of a 600-acre land holding. Thomas Synder was a doctor in Philadelphia, who appears to have bought the property as a country retreat. No other information regarding his ownership is available. Six years after purchasing it, Snyder sold the property to The Allegheny Conference Association of Seventh Day Adventists (currently known as The Allegheny East Conference of Seventh Day Adventists).

[104] Berks County Deed Book 835, pg. 327.

Chapter Five

The Allegheny East Conference of Seventh Day Adventists and Pine Forge Academy, 1940-Present

The Allegheny East Conference of Seventh Day Adventists

Prior to purchasing the property, the Allegheny East Conference of Seventh Day Adventists (referred to subsequently as the Conference) had been actively seeking a location where they could establish an African American boarding school. Thomas Snyder was supportive of this plan and agreed to sell the Conference, his 600-acre property in Berks County, of which the historic Pine Forge tract was a part. Upon purchasing the property, the Conference began the work of establishing their boarding school, which they named Pine Forge Academy.

At the onset, the Conference used many of the historic buildings on the property for classroom space and for student and teacher housing. A school yearbook from the 1950s identifies the uses of the property's old buildings. Many of the old tenant or workers' houses were being used as "classrooms" or "teacher's housing." The old gristmill was used for "art classrooms," while the main house served as the "female dormitory." As the school grew, the Conference began to build new, modern buildings and the older buildings became obsolete. Their age and obsolescence caused many of the old buildings to be torn down or neglected in the 1970s and 1980s. Most of the tenant houses were torn down and there are only the skeletal remains of several other buildings on the property (these remains have not been discussed in this thesis since their origins and original uses are not known.). Although they were not torn down, the smokehouse/root cellar" and the "caretaker's cottage" have been damaged by neglect and lack of

Figure 44 Smokehouse/Root Cellar, looking north, 2001

maintenance. Both buildings are in poor condition with extensive water damage. The smokehouse/root cellar, especially the eastern section, which is probably the oldest portion of the building, is in particularly poor condition, as seen in the photograph in Figure 44.

The barn, gristmill/sawmill, and manor house remained in daily use longer than any of the other extant historic buildings. In order for this to occur, these buildings underwent significant alteration. The alterations made to the gristmill are not known since the building was destroyed in a fire in the early 1990s (only the lower portions of the exterior walls remain standing as shown in the photograph in Figure 46). The barn was gutted and renovated in the 1980s to provide classroom space for Pine Forge Academy; its current appearance is depicted in the photograph in Figure 45. Although its interior has been

Figure 45 Barn, looking northeast, 2001

Figure 46 Gristmill Ruin, looking northwest, 2001

altered, the building retains integrity of location, size, construction materials, and the form of its original exterior appearance.

The main house retains much of its original exterior appearance but many interior details have been altered or removed. Drawings of the interior floor plan in its current configuration – shown in Appendix A - provide the best visual evidence for these changes, as does oral history provided by representatives of the Conference. When compared to the E.R. Staples "Sketch Plan," (Figure 38) it is evident that the center section of the house has been the most substantially altered. Nearly all of the partition walls have been removed along with most of the interior finishes. The southeast corner chimney was used for the flue for the modern furnace, which was added to the building in the 1970s – the modern concrete block flue is visible in the attic. Installation of this furnace required the removal of the corbelled fireplace support and the first and second floor corner fireplaces, and their surrounding woodwork and mantelpieces. A member of the Conference remembers removing these fireplaces as a way to work-off part of his tuition. The stair in the center section of the house was also removed at some time leaving no connection between levels in the center block.

The north and south wings are relatively intact although modern carpeting or vinyl flooring, modern ceilings, heat registers, and paint have been introduced throughout the building. The west room on the first floor of the south wing was renovated as a modern kitchen; the original fireplace in this room was probably blocked up when this renovation was completed. The building's wood shingle roof and pole gutters were replaced with a modern asphalt shingle roof and metal gutters.

Like the several owners before them, the Conference has done nothing with the dam and millrace that had provided the waterpower necessary for the grist and sawmill and the forge. Left to the effects of nature, the remains of the dam and millrace indicate

that it was essentially a soil berm with stone reinforcement. Figure 47 shows the large rectangular blocks of stone, laid in a regular pattern, that identify the extent of the current dam structure. The upstream (north) side of the dam appears to have been earth while the downstream (south) side was reinforced with stone. This stone has a color and appearance similar to that used in the construction of the south wing of the main house. The millrace was similarly constructed.

Figure 47 Stonework of the Dam, 2001

Several surveys made in the 1800s, shown in Appendix C, depict the location of the dam and course of the millrace. The present course appears to match these historic depictions. The millrace begins approximately 100 yards north of the present day roadbed for Douglass Drive, where the soil and stone dam nears the eastern edge of the creek-bed. The millrace follows the steep east side of the creek-bed as it moves south toward the location of the gristmill/sawmill. The culvert in the present roadbed marks the low point of the millrace, which continues for at least another 100 yards south of the road before rejoining Manatawny Creek.

In the early 1990s, the Conference recognized that the Pine Forge property had historical significance. The Conference organized the Committee for the Preservation of the Pine Forge Academy Historical Site, which is charged with obtaining recognition and funding for the preservation of the remaining historic buildings. In 1992, the Pennsylvania Bureau of Historic Preservation determined it eligible for listing on the National Register of Historic Places, for its association with Thomas Rutter and the Pennsylvania iron industry. Since that time, this committee has organized several fundraising functions and procured a grant from the Stewart Huston Charitable Trust.[105] A National Register Nomination, written in conjunction with this thesis, is a step in procuring recognition and funding for these buildings. This committee has also contracted John Milner Architects, Inc. to document the remaining buildings and identify preservation and restoration priorities and issues.

[105] "Pine Forge Historical Review," the Official Newsletter of the Pine Forge Academy Historical Society. Issue 1, No. 1. May 2001.

Chapter Six
Preservation Recommendations

Preserving a property like Pine Forge Iron Plantation involves a number of complex issues. Besides assessing the current condition of each building, it is also important to determine, as clearly as possible, its change over time and identify those physical aspects that best represent significant historical periods. Once this information is collected and analyzed, then informed decisions regarding the future of each building can be made. Due to the number of buildings and landscape features that have survived at Pine Forge Iron Plantation and the complex issues involved in any preservation project, it is important to identify priorities and tasks to direct the preservation process.

Condition Assessment and Stabilization

Although this thesis has provided new archival and physical evidence for each of the extant resources on the plantation, a great deal is still unknown. Given the lack of information, it would be premature to determine that any of these resources should be summarily recorded and demolished. Retention of these extant buildings is especially important since so many other historic resources related to iron production and workers housing on the plantation have been demolished. Demolition, either by choice or neglect, of the smokehouse, caretaker's cottage, gristmill ruins, or dam and millrace remains could seriously undermine the historic integrity of the site. Therefore, the first priority should be conducting a condition assessment and identifying stabilization methods for the most threatened resources. These stabilization methods should allow the

building to be safely "mothballed," so that appropriate preservation treatments can be applied once appropriate new uses are identified and funding is attained.

A cursory condition assessment identifies the smokehouse/root cellar as the building most in need of immediate stabilization. The ruined state of the roof and loss of a significant amount of the mortar and pointing on the building's front section is threatening the long-term structural integrity of the entire structure. A protective covering should be put over the building immediately. The intact sections of the current roofing system should be shored up and recorded through photographs and drawings and the integrity of the wall system should be assessed. In addition, the building should be cleaned out. In particular, the pile of shutters, which appear to be from the main house, should be removed from the front section of this building and stored in a more appropriate and dry location.

The caretaker's cottage, while in a less precarious condition than the smokehouse/root cellar building, also has serious condition problems. Most notably, the cornice appears to have failed. As a result of this failure, moisture is entering the wall and interior of the building and causing serious damage. The roof may also be failing and there has been a great deal of mortar and pointing loss from both the exterior and interior walls. All of these problems can contribute to the interior moisture damage that is evident. Besides covering the roof and cornice it may also be helpful to remove the modern paneling, plaster, and vinyl flooring, which has been seriously damaged by moisture, so as to lighten the dead load of the building. The removal of these elements would also allow an assessment of the condition of the structural members to be made more easily. The debris and wild animal's nest in the basement should also be cleaned out.

The stone remains of the gristmill should be assessed for stability and, if necessary, shored up. Information regarding the instability of these and other ruins on the property should be posted nearby. These remains, as well as those of the dam and millrace, should be off-limits to Pine Forge Academy students and the public. The deterioration of these features should be monitored. In addition, the debris from several recent demolitions, which has been piled in the millrace, should be removed and disposed of appropriately.

The garage and barn appear to be in good condition. With the exception of a water leak in the basement of the north wing that may have caused some damage and several sections of rotted cornice on the south wing, the manor house appears to be in good physical shape and in no need of immediate stabilization.

More Information

Like any project, this thesis was, of necessity, limited by time, scope, and the interests of the author. Because of this, it is safe to assume that additional sources of information remain untapped. Therefore, the second priority of the ensuing preservation process should be identifying where additional information is required. As the preservation process proceeds, many information gaps will be identified and remedied; the following are some glaring and specific gaps that already can be identified and some suggestions for how to proceed.

Although an attempt was made to elucidate the building chronology of all the resources on the property, this thesis focused on the main house. This focus required that the other extant buildings receive less attention and, therefore, the information for these

buildings is less detailed than it could be. To address this deficiency, an in-depth physical examination of the other extant buildings on the property should be conducted. This examination, as well as additional culling of archival sources, should be combined to produce building chronologies for these other buildings. In addition, thorough examination of the Pine Forge Ledger books, John Potts personal papers, and any other archival resource not already identified could substantiate, amplify, or contradict, the information herein presented.[106]

While the main house was studied closely for this project, no materials testing, removal of modern finishes, or demolition was conducted. Analysis of mortar samples, particularly from the basement walls of the center section of the house, could clarify the building chronology of the interior masonry wall and identify the different types and dates of the pointing mortar used on each section of the building. Analysis of paint samples, taken from throughout the main house, could conclusively date each section's decorative wood trim. Information obtained through paint analysis may also be the best method for distinguishing Okie's decorative influences in the south wing. Nail analysis may also be helpful for dating the different building campaigns. Selective demolition and removal of the modern floor covering and paneling could also produce a significant amount of additional physical evidence, especially for the original interior layout of the house.

Although repeated building campaigns and demolition have disturbed the archaeological value of the original forge site, archaeological testing and study of other areas on the property could enhance the current historical record. Information and

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[106] Ledger books can be found at Pine Forge Academy, The Historical Society of Pennsylvania, and the Pottstown Historical Society. John Pottses papers can be found at Pottsgrove Manor in Pottstown, Pennsylvania.

understanding relating to certain areas of the property, notably the tunnels, allegedly used by fugitive slaves escaping via the Underground Railroad, the dam and millrace, and other ruins on the property, would benefit immensely from archaeological study.

Interpretation and Use

Identifying alternative uses for historic buildings is a complicated process. It is a process that involves identifying the needs and desires of the property owners and weighing these against the significance and intact physical fabric of the historic building. In some cases, the historical significance of the structure outweighs other considerations and requires that museum-quality restoration be chosen as the preservation approach. In many other cases, a balance between preservation and modern needs can be struck. In these situations, rehabilitation, guided by the *Secretary of the Interior's Standards for Rehabilitation*, is the chosen preservation approach. In some cases, a combination of restoration and rehabilitation best serves the building and the modern needs of the owners.

The Committee for the Preservation of the Pine Forge Academy Historical Sites (hereafter referred to as the Committee) identified alternative uses in their "Projected Use Plan for the Pine Forge Iron Plantation Historic Buildings."[107] For the Manor house, the Committee proposes three different uses that relate to the building's three wings. The Committee proposes that the south wing be restored as a house-museum, with period appropriate furnishings. The center section, it is proposed, would be renovated to provide space for exhibits of plantation artifacts, restrooms, storage, and a gift shop.

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[107] The preliminary plan outlines new uses for all of the extant historic resources on the property.

Renovation of the north wing is also proposed, with its space being used for staff offices and an apartment for the site manager. The following is an assessment, based on the data as presented in this thesis, of these proposed uses. In addition, this thesis contains several other interpretation and use proposals.

Museum-Quality Restoration

With the exception of the Garage, the extant buildings appear to relate to the property's function as an iron plantation. Since the property's primary historical significance is its role in the development of the Pennsylvania iron industry, it is important that any future interpretation represent this history and that any future use not obscure extant physical representations of this history. However, the buildings, particularly the Manor house, also depict changes made to facilitate new uses and styles that post-date the property's involvement in iron production and other periods of historic significance. Therein lies the key difficulty in pursuing the proposed use outlined by the Committee.

A museum-quality restoration would be the most precise preservation approach. For this approach, the building would be restored to appear as it did during the identified period of historical significance. Archival and physical evidence would be used to guide the restoration process. As outlined by the Committee, the restored portion of the Manor house would serve as a museum and location for interpreting the property's history. This use would allow the site to convey its history and provide an opportunity to collect an admission fee to help defray the costs of administration and maintenance. In some cases,

this is the appropriate preservation approach, however, there are several reasons why this may not be in the best interests of either the Manor house or the property owners.

First, the complex and extensive history of Pine Forge makes the prospect of choosing only one period of historical significance a challenge. While the property is primarily significant for its role in the Pennsylvania iron industry, several buildings also represent the work of Richardson Brognard Okie, an important Pennsylvania architect. The architectural work of Okie is therefore historically significant in its own right. And, if the property's association with the Underground Railroad can be substantiated, it adds another level of historical significance to the property. Choosing to restore any portions of the Manor house to its "original" appearance within a narrow period of interpretation would result in the loss of physical evidence from other, no less significant, periods in this building's history. Alternatively, choosing a broad period of interpretation, so as to retain the most physical fabric, could result in the dilution of the historical significance of the various periods to such a point that none of the property's historic significance was appropriately represented.

The second problem inherent in this approach also relates to the complex layers of the site's history. The property is significant as an iron plantation; however, with the exception of the dam and millrace remains, no features directly related to the production of iron remain. Therefore, a successful interpretation of this history relies on the restoration of any, and perhaps all, of the extant resources related to the property's function as an iron plantation. This means that while restoration of the smokehouse, for example, to its appearance during the period of iron production may not compromise other layers of historically significant fabric, the restored building can in no way be

expected to adequately represent the site's history as an iron plantation. While this is a fairly obvious example, it is unlikely that any one building or landscape feature, including the manor house, could adequately represent the significance and history of the site for any one period of its history. Given this reality, it becomes evident that a successful iron-industry related museum (or any other period or use-specific museum) would entail the restoration of most of the extant buildings and landscape features. The financial and managerial demands for this type of preservation project would be extensive, which is why many historical sites of this scope are managed by state or national government agencies.

The third problem is the current deficiency of archival and physical evidence upon which to base a period-specific restoration. It is important that a restoration be based on historic and physical facts rather than conjecture, especially when it is meant to serve as a museum that conveys information about a period of history, event, or significant person. Right now, the archival record (photographs, contemporary oral descriptions, etc.) does not provide adequate information upon which an exacting restoration of any section of the Manor house could be based. Although it is the building with the best archival record, this thesis has shown there are still many gaps in its documentary history. In addition, the physical record, as it is currently understood, rather than providing answers often leaves many significant questions. These gaps in physical information are partially due to the fact that much of the existing physical fabric dates from the period after iron production ended on the property. This is especially true for the Main House, which contains many physical details that date to the renovation done by Richardson Brognard Okie in the early twentieth century. Although the existing archival and physical evidence may be

clarified with more research, it is not currently a sufficient basis for a museum-quality restoration relating to any specific period of the property's history.

Another problem is one that is not specific to this site, but is felt by anyone attempting to establish a site-specific interpretive museum. Although the resource and its story may be historically significant, the difficulty lies in identifying a constituency for the museum. Without an active and identified constituency it is often difficult, if not impossible, to fund the restoration, maintenance, and staffing of a museum. The Pine Forge Iron Plantation may have particular difficulty in this since there are already several other iron-industry related museum sites in the immediate area. While a concentration of similar historic resources can encourage thematic heritage tourism, it also increases competition for over-extended funding sources and tourist dollars. In most cases, the concentration of historic resources is most successful when the various sites unite to share resources and a thematic interpretation plan. Since no such relationship between Pine Forge Iron Plantation and other area iron-industry historical sites (Cornwall Iron Furnace, Pottsgrove Manor, Hopewell Furnace) has been established at this time, it is not clear if collaboration would ease the financial and interpretive burden inherent in establishing a new interpretive museum in this area.

Although it may seem that the assessment provided above is meant to disabuse the Committee's proposed use for the Manor house, this is not the case. Rather, the issues identified above are meant to inform the preservation process for this resource rather than dissuade from it. A museum-quality restoration, in the strictest sense, would entail significant preservation challenges, however, the historical significance and educational potential of this property is still substantial and the means of preserving and

conveying this history should be pursued. While a house-museum as currently defined by the Committee is probably not appropriate for this resource, the diversity of the site's history and the layered nature of its architecture provide definite opportunities for developing creative restoration and interpretation techniques for a different type of museum experience.

Heritage Education Center

Given the diversity, individuality, and contextualism of heritage education programs around the country, it is no surprise that this approach to education has no precise definition. The National Trust offered the following definition, in part:

> Heritage education is an approach to teaching and learning about history and culture…that uses primary sources from the natural and built environments, material culture, oral histories, community practices, music, dance, and written documents …integrated and considered from interdisciplinary perspectives …to help us understand our local heritage and our connections to other cultures, regions of the country, the nation, and the world as a whole.[108]

Even if they disagree on how to define their approach, heritage education programs all tend to

> …emphasize hands-on, experiential learning, interdisciplinary learning, and the use of tangible resources to provide context, to stimulate imagination, to make connections, and to gain an 'emphatic' understanding of history.[109]

The important role that these programs play is two-fold; first, they can help instill a preservation ethic, and second, their use of "…interdisciplinary methodology and utilization of local, contextual resources can inspire deeper understanding and multi-

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[108] Kathleen Hunter, "A Commitment to Education: Designing a Heritage-Education Center for the National Trust: A Final Report," *Historic Preservation Forum* 6, no. 1 (January/February 1992), pg. 17-18.

[109] Cathleen Ann Lambert, "Heritage Education in the Postmodern Curriculum" (master's thesis, University of Pennsylvania, 1996), pg. 29.

dimensional learning in history, language, cultural history, geography, sciences, and other subjects."[110] In short, a well-designed heritage education program can benefit both education and historic preservation. Since the Allegheny East Conference of Seventh Day Adventists jointly manages this particular historic resource and the adjacent school, developing a heritage education program on this site could allow the Conference to address both its education and preservation goals.

The preservation approach suggested here is not wholly unlike that proposed for a museum-quality restoration. For this alternative, restoration (returning something to its historically and architecturally significant appearance) would still take place, but the process would be much more selective than for a period-specific restoration. Unlike a full-scale restoration, where buildings and landscape features are restored in their totality, this preservation alternative would involve the restoration of only those individual features with documented provenance. Other features – like the opening for the winder stair in the attic and the remains of the interior partition walls in the center section of the main house – would not be restored in this alternative. Rather than restoring these features, the vestiges of their existence would be interpreted in place. These features, as well as the rest of the Manor house and the property, would be interpreted in a manner that allows visitors to "read" the place or object in a way that is like, but not identical to, reading a history textbook. The site could be a "primary source" for learning about architectural, industrial, and social history. With the assistance of motivated teachers, students, and curriculum specialists, this site and its interpretive approach could become an active

[110] Lambert, pg. 4.

heritage education center. While the specific means of achieving this outcome are beyond the scope of this thesis (preservation, interpretation, and education specialists will be required for this process), the reasons it has been presented as a preservation alternative will be discussed.

First, this alternative would allow the property to communicate information pertinent to various periods in its history. Rather than focusing solely on iron-industry related history, other periods of the site's architectural and social history would be interpreted to provide visitors with a contextual understanding of the site. Second, the approach would be less damaging to the physical fabric of the main house. Instead of adjusting and retrofitting the building to convey a specific time period and function, which would require leaps in historical faith and removal of other, significant layers of history, the removal of physical fabric could be minimal. The retention of this physical fabric provides future opportunities for research, which could lead to a better understanding of the chronology of the property's built environment. Such information is invaluable for the future development and refinement of the site's interpretation.

Regardless of the type of museum, success requires identifying, attracting, and retaining an audience. This process could be simplified for this resource since it has a potential audience right across the street. The site's location (adjacent to a secondary school) means that even without significant financial expenditures and the involvement of all the professionals identified above, it could start to function as a heritage education resource. How this relationship might be defined depends upon the students and teachers at Pine Forge Academy, but there are obvious ways that links could be formed.

Students might, with proper supervision, perform rudimentary restoration or maintenance on the historic buildings. English or History teachers might identify correlation between the history represented at the site and the curriculum that they are presenting to their classes. Where overlap occurs, teachers might identify methods for integrating the site with their lesson plans. One example could be the Junior Docents program at Drayton Hall in Charleston, South Carolina. Like the students at Drayton Hall, Pine Forge Academy students could research the site's history and put together their own interpretation programs to present to other classes, staff of the Conference, or visitors. Educators at Drayton Hall have found that for the student docents "...not only did the information become more real to them because of the physical site, but it also became more real when they were expected to discover information on their own, analyze it, and figure out a way to represent it."[111] For many teachers, this type of educational program might seem like an additional burden placed on an already over-extended schedule. To ease this concern and to provide teachers with specific examples of the benefits, challenges, and methods for developing this type of curriculum, it would be useful to organize a teacher in-service with a professional involved in heritage education and/or curriculum development.

As stated at the onset of this section, this preservation approach shares much with the "museum-quality restoration" discussed previously. Its differences are in its interpretation emphasis – education rather than presentation – and its application of restoration – selective rather than period driven. While the second approach may resolve

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[111] Lambert, pg. 37.

some of the financial and preservation challenges identified for the first alternative, it should not be construed as less rigorous. Nor should the lists of benefits for this alternative herein identified hide the fact that the process would involve significant financial risk. And, just like any other type of museum, this site would still have to compete with other area attractions for visitors and their entrance fees.

Other Uses

Besides a museum, the Committee's use proposal for the manor house contained two other types of uses: visitor services (gift shop and restrooms) and an apartment for the site manager. Since the need for visitor services is predicated upon there being visitors, this use may or may not be necessary. Should it become necessary, a gift shop could be installed into the interior space.

However, there is some question as to whether introducing public restrooms into the Manor house would be appropriate. Although the building already contains modern plumbing, the space requirements of a public restroom may be too demanding. This is particularly true if the chosen preservation approach includes interpreting, in place, intact physical evidence. In this scenario, there would probably not be enough room on the first floor of the center section for a restroom. Although installation would be expensive, it might make sense to install the public restroom, or rooms, in the rear sections of the smokehouse building. At this time, very little information exists for this building and restoring it to represent a speculative past use would be unnecessary. This is especially true if no significant use can be identified for it in a restored state – right now the Committee proposes to use it as exhibit and storage space. Unless additional information,

identifying its past use and appearance is uncovered, there appears to be no reason why this building, particularly the rear sections, should not be renovated and used for public restrooms. It appears to be approximately the right size for such a use and it is easily accessible from the manor house.

Providing an apartment for a site manager in the manor house would be appropriate. Given the size requirements outlined by the Committee, it appears that an apartment would fit into the north wing of the Manor house. Although this wing is an architecturally significant element of the house, due to its association with Richardson Brognard Okie, making it a private space would not negatively affect the house's ability to convey this period of significance. In other words, since Okie's influence can be seen in other parts of the house, there is no need for the north wing to be used as a public space. Still, as a significant architectural expression, the north wing should be sensitively rehabilitated to retain its Okie period features. This rehabilitation should be guided by Okie architectural drawings found at the Pennsylvania State Archives and the *Secretary of the Interior's Standards for Rehabilitation.*

These are just a few options for the use and interpretation of this historic building. There are certainly many other possible uses, or methods of interpretation, that may be more appropriate or cost-effective. But, before a use can be identified or an interpretation plan formulated the information gaps identified in the previous section must be remedied. It would not be appropriate to expend time and resources on a museum dedicated to any topic until the property's historical tie to that topic has been substantiated by thorough historical research. It would also be premature to formulate a preservation treatment plan until additional information about the physical development of the building has been

obtained, and an appropriate use has been identified. Although this planning process will consume time and resources, it is indispensable to a responsible and successful preservation project.

Conclusion

Documenting the nearly 300-year evolution of Pine Forge Iron Plantation, has established that the property and its owners have been involved in architectural, industrial, and social movements that are historically significant on the local, state, and national levels. Whether as a rare local example of the "three-cell" architectural plan or for its association with the nationally significant Underground Railroad, the property and its buildings physically represent the trends, changes, challenges, and successes of this history. Consequently, the property and its buildings provide an opportunity for interpreting and disseminating this information. The question is – how to preserve and interpret this resource? Several methods have been commented upon in this thesis but there are certainly other options left to be discovered.

Choosing to establish any type of museum requires the thoughtful, and often arduous, preparation of extremely specific cultural resource management plans. These plans, no matter what type of interpretation is intended, should address everything from heating and cooling, to interpretation, to fundraising, to choice of paint color. The process of developing these plans can be expensive but also extremely helpful, both for the preservation process and for defining exactly what type of use best suits the historic resource and the property owners.

Should the Committee decide that the financial burden or preservation strictures inherent in establishing a site museum are too cumbersome, possibilities for other uses of this and other buildings on the site remain. Although it would still require substantial funding, this building could be successfully rehabilitated as office or classroom space for

Pine Forge Academy, the Allegheny East Conference, or rental. While it is important to preserve these buildings, it is also imperative that they return to productive use. If they do not, it is likely that they will suffer the fate of many of the historic buildings that no longer remain on this, and many other, historic sites.

Appendix A: Current Floor Plans of the Historic Buildings

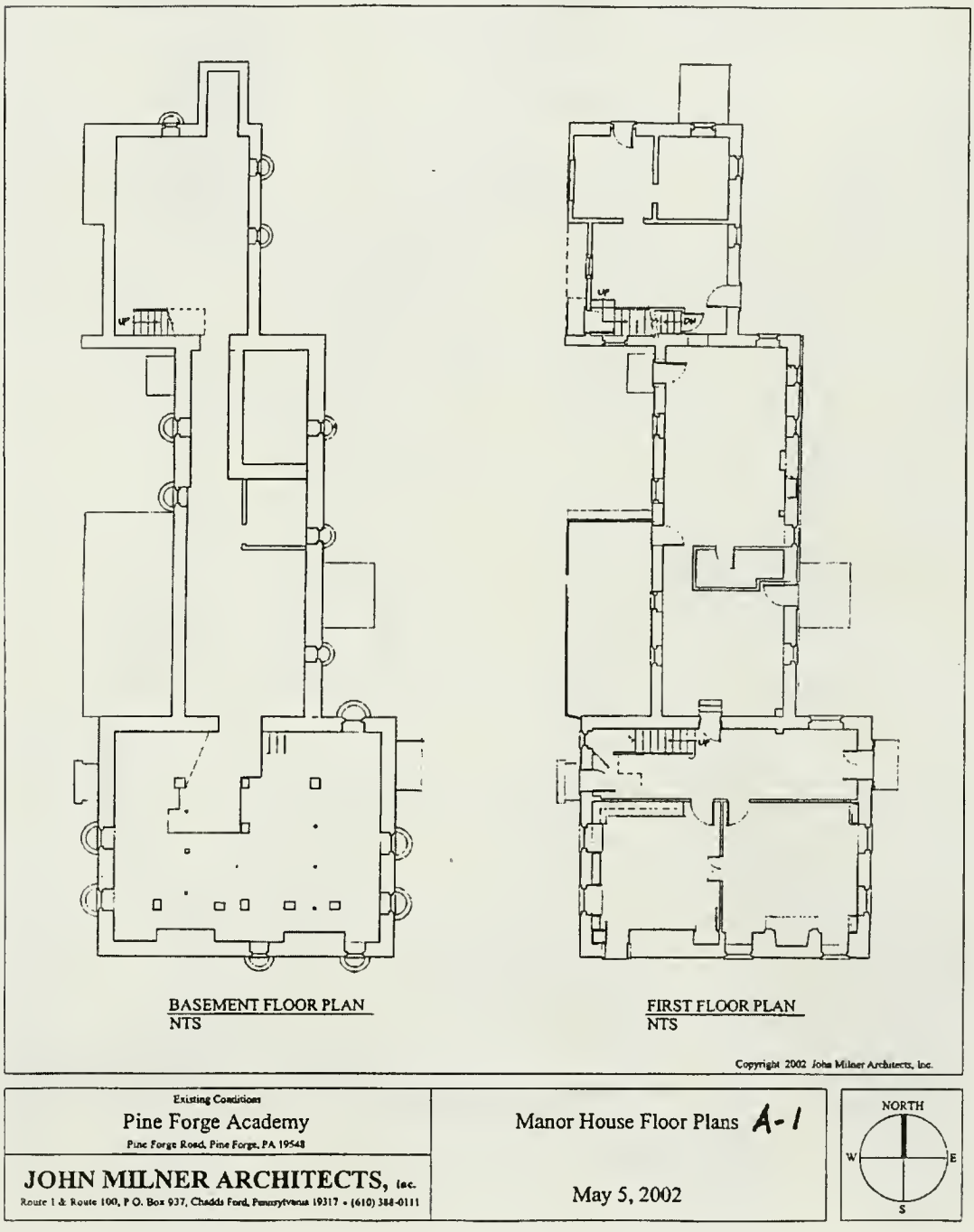

Figure A-1 Manor House, Basement and First Floor Plans, 2002

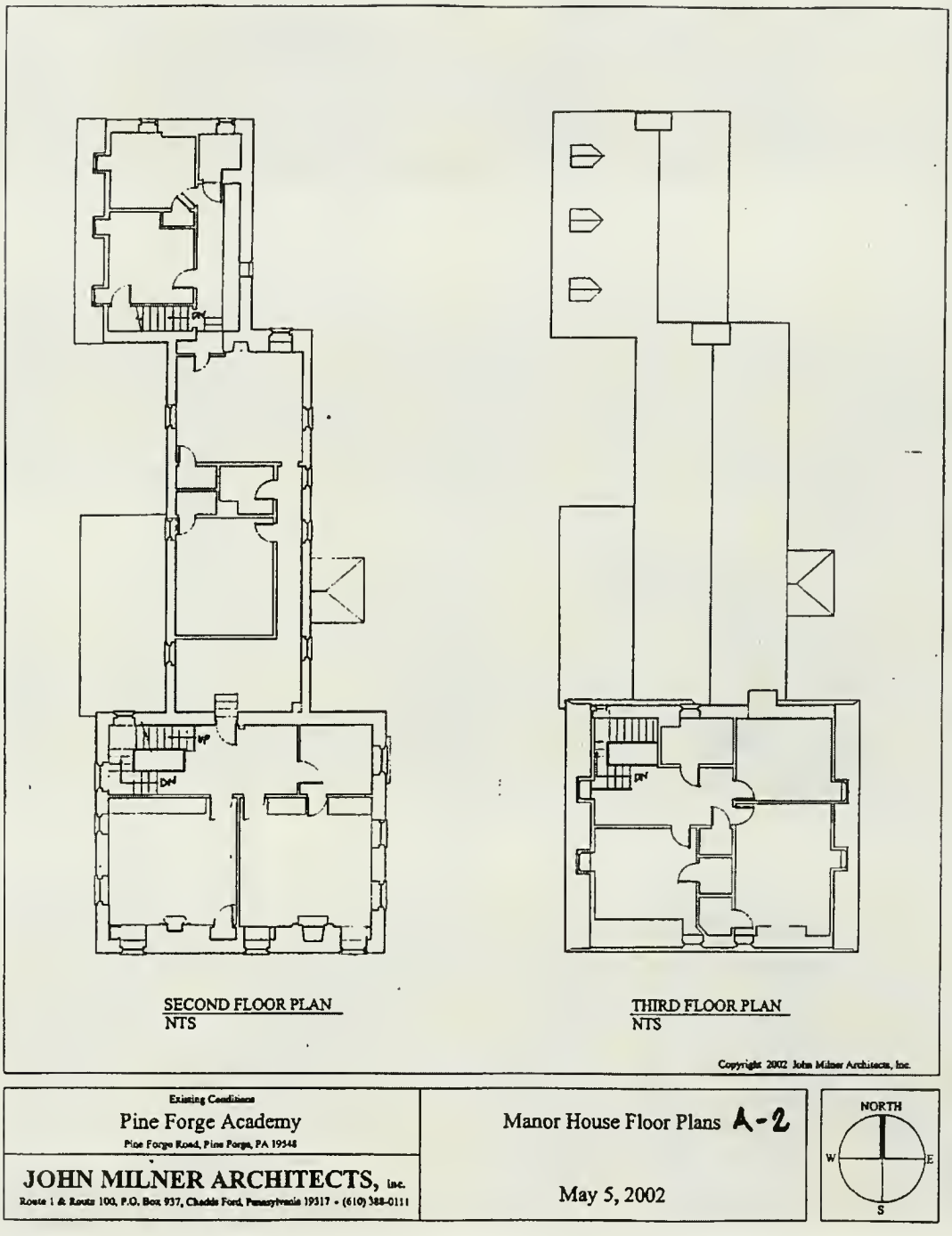

Figure A-2 Manor House, Second and Third Floor Plans, 2002

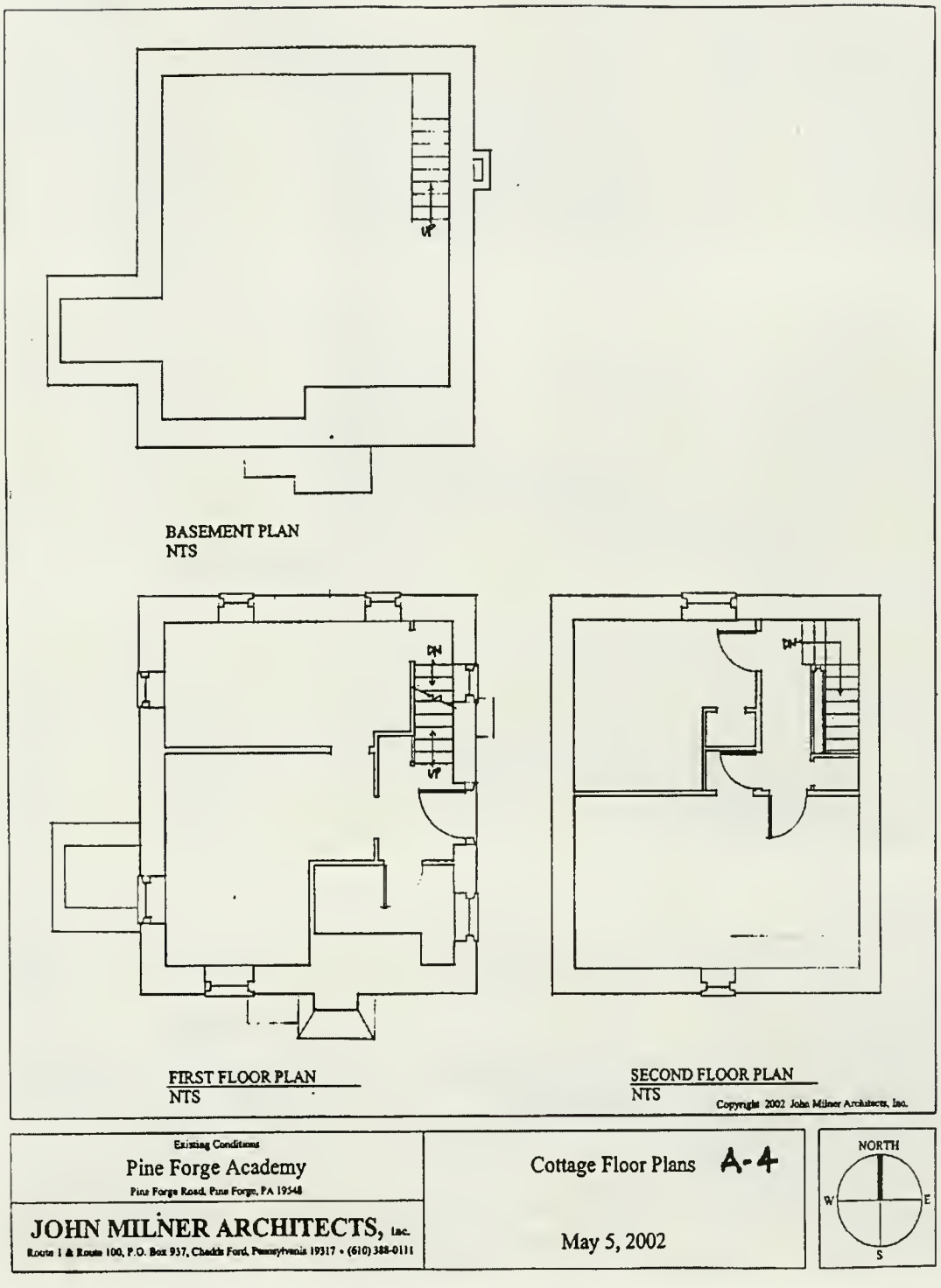

Figure A-3 Caretaker's Cottage Floor Plans, 2002

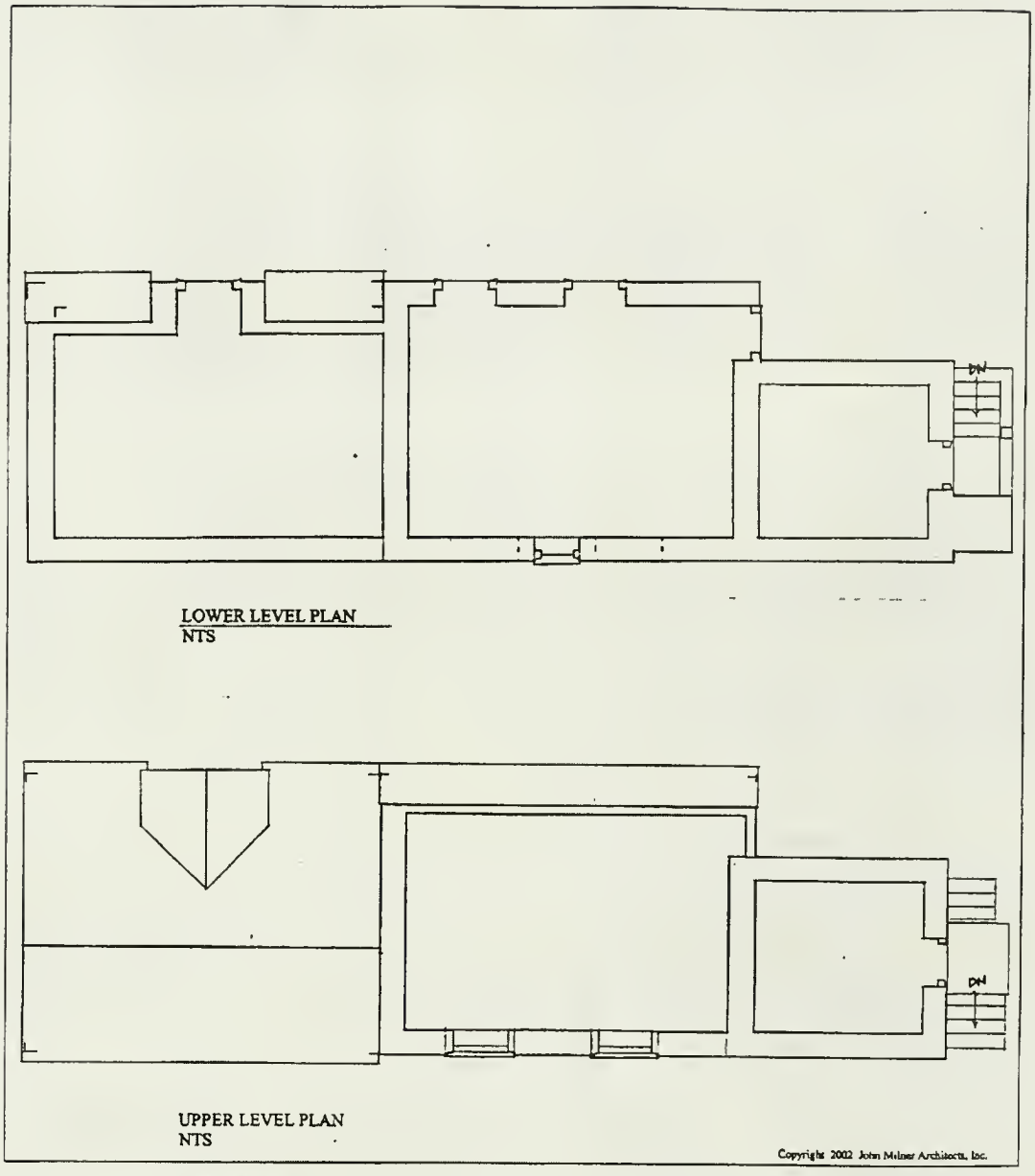

Figure A-4 Smokehouse/Root Cellar Floor Plans, 2002

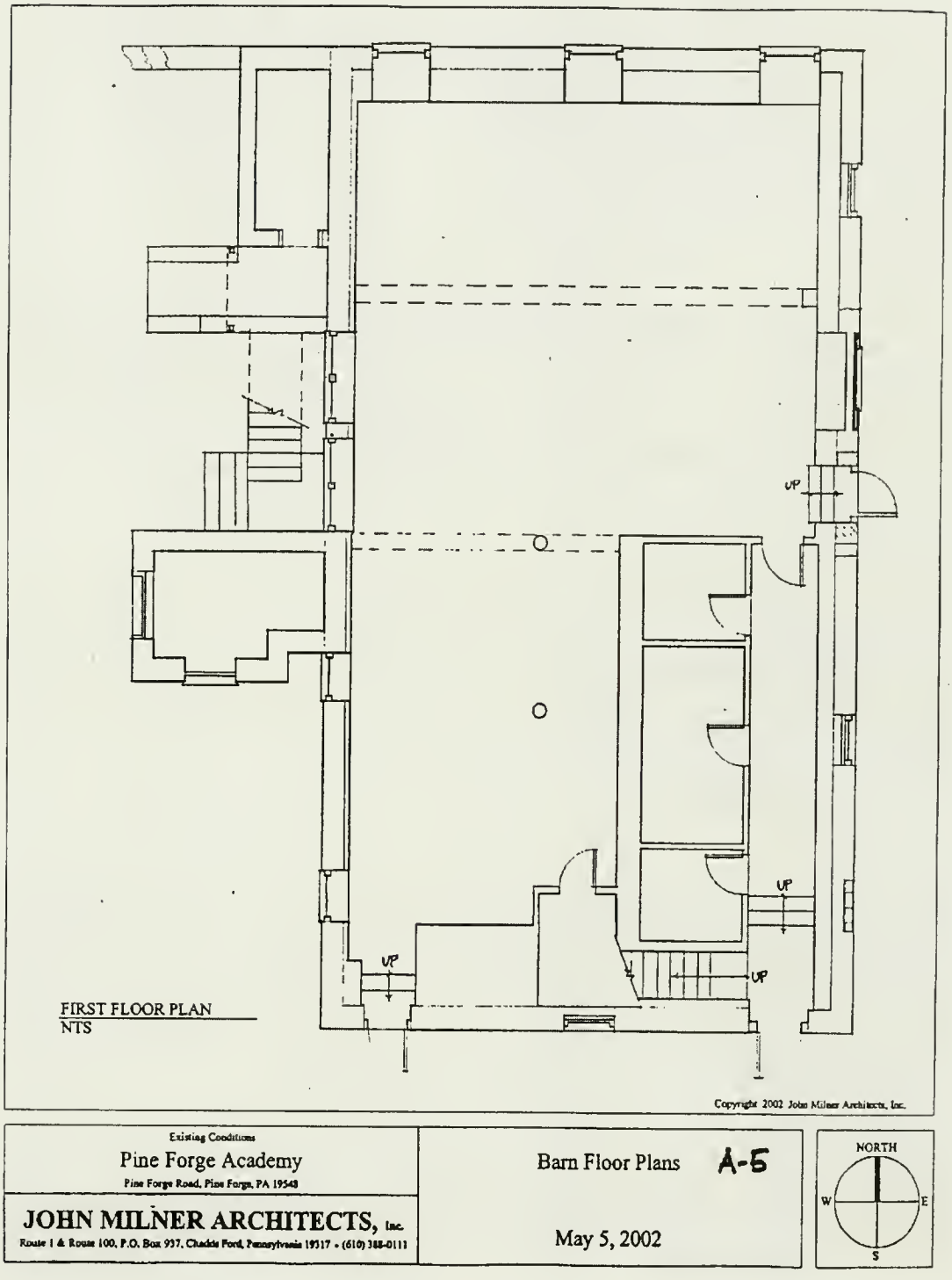

Figure A-5 Barn Floor Plans, 2002

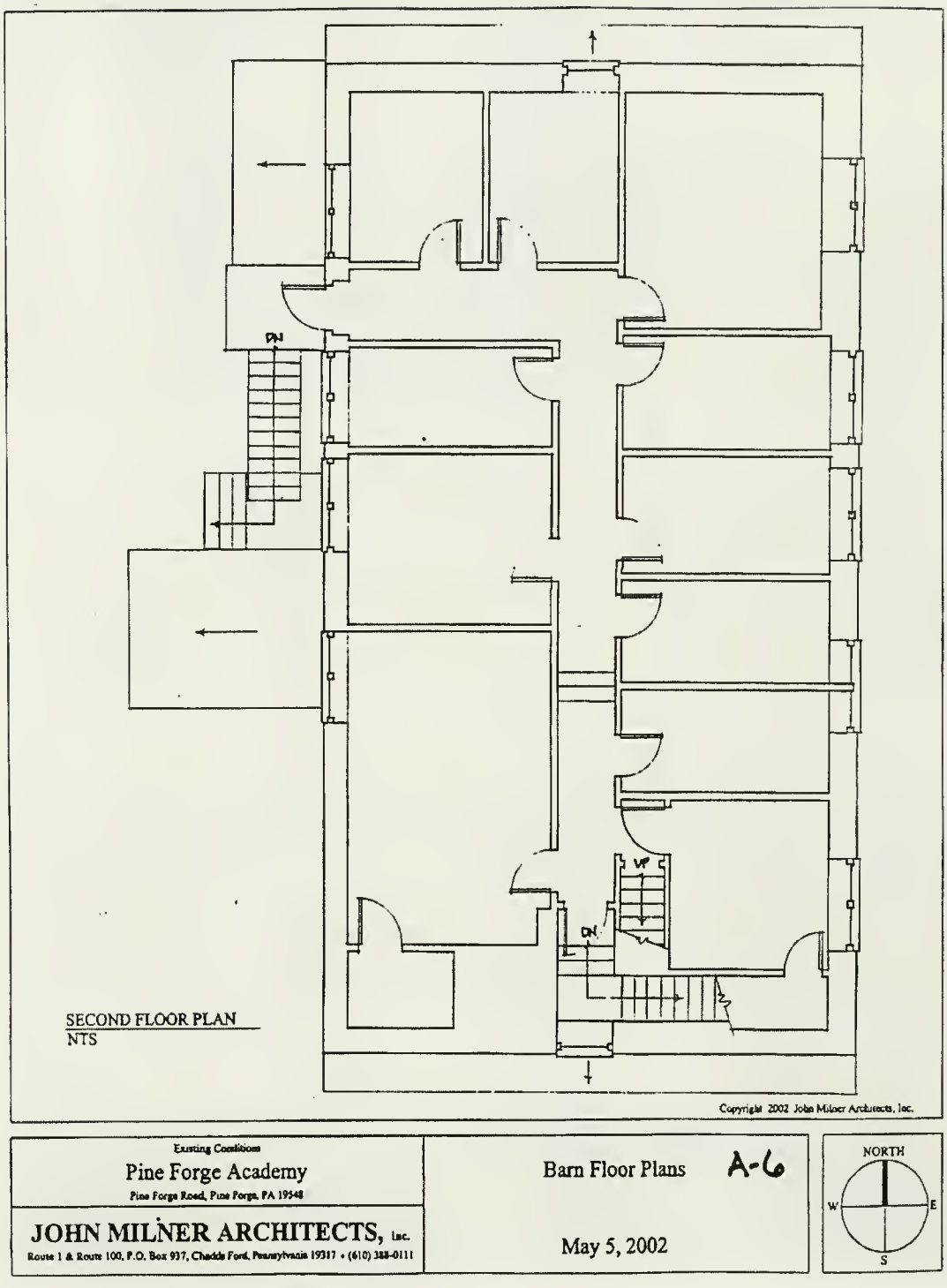

Figure A-6 Barn Floor Plans, 2002

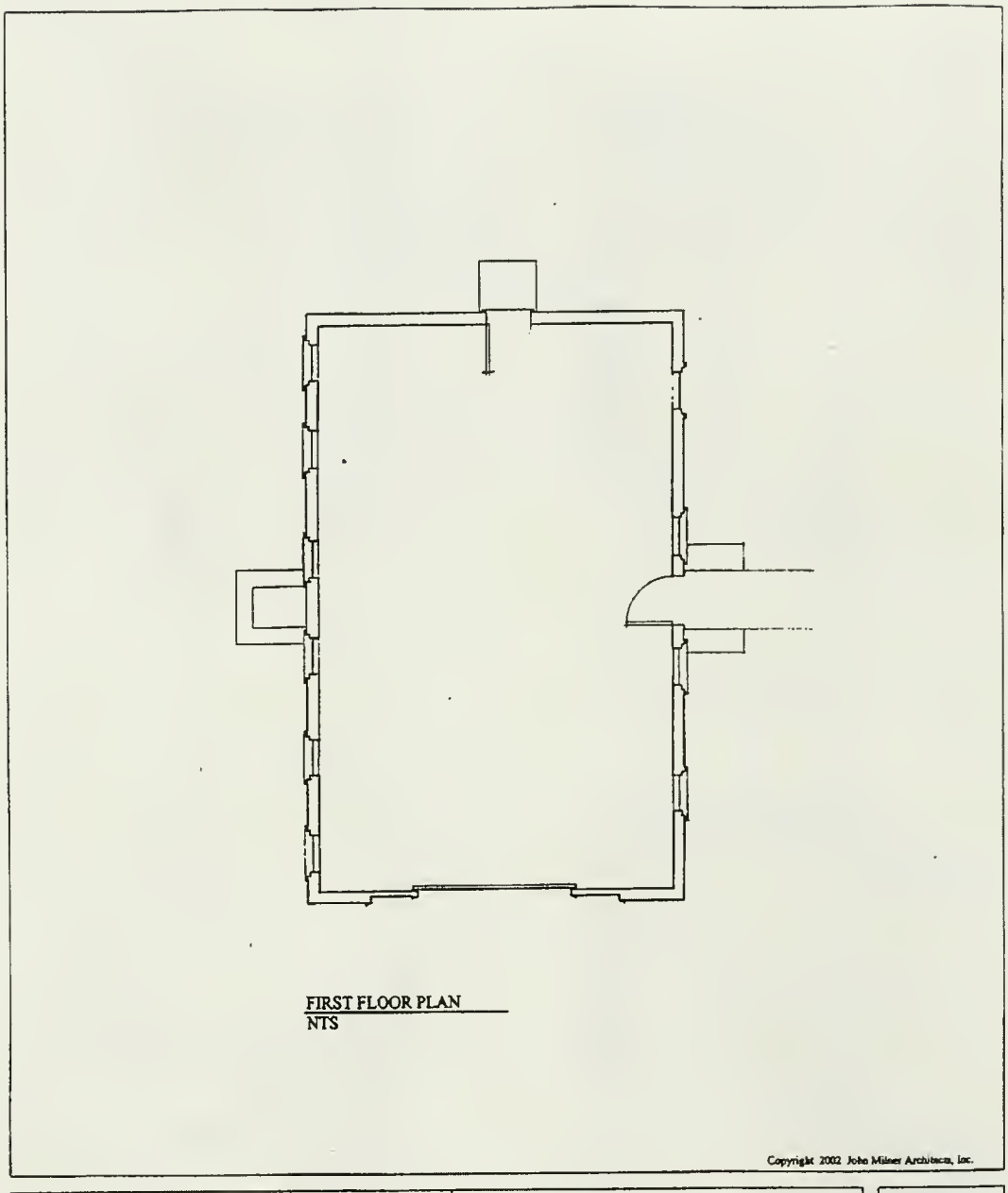

Figure A-7 Garage Floor Plan, 2002

Appendix B: Location of Window Types

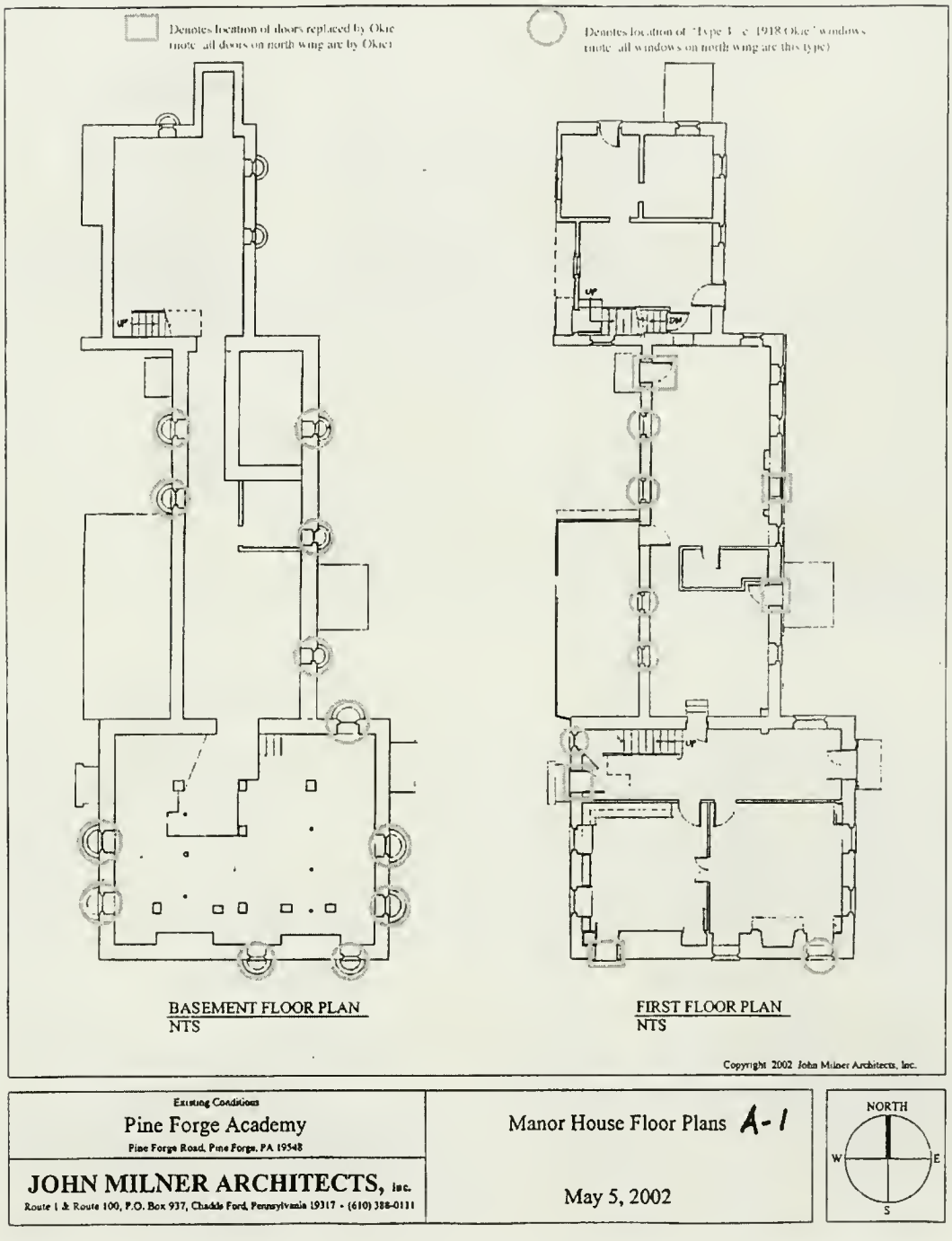

Figure B-1 The Center Section and South Wing windows and doors that were altered during c. 1918 Okie renovation are highlighted

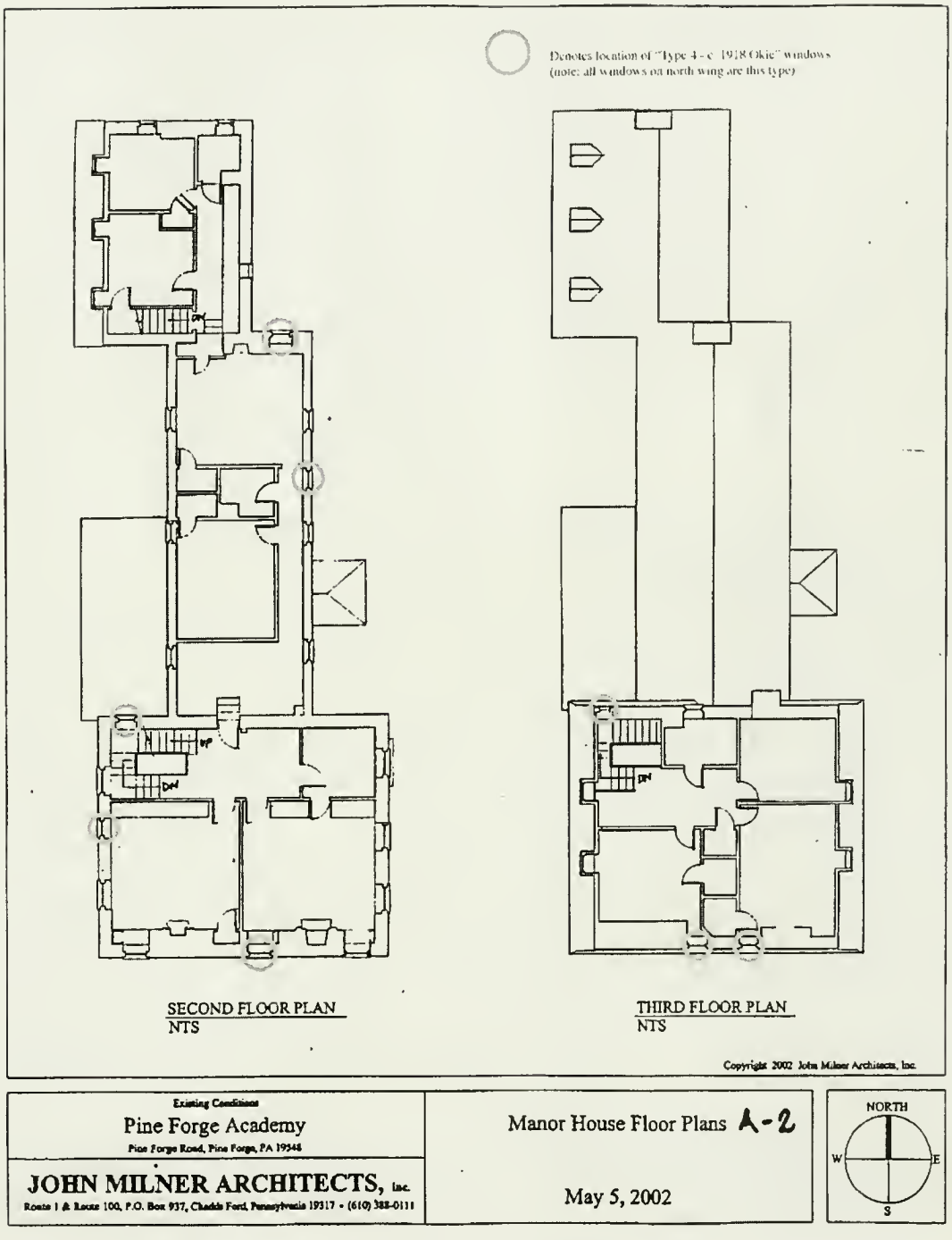

Figure B-2 **The Center Section and South Wing windows and doors that were altered during c. 1918 Okie renovation are highlighted**

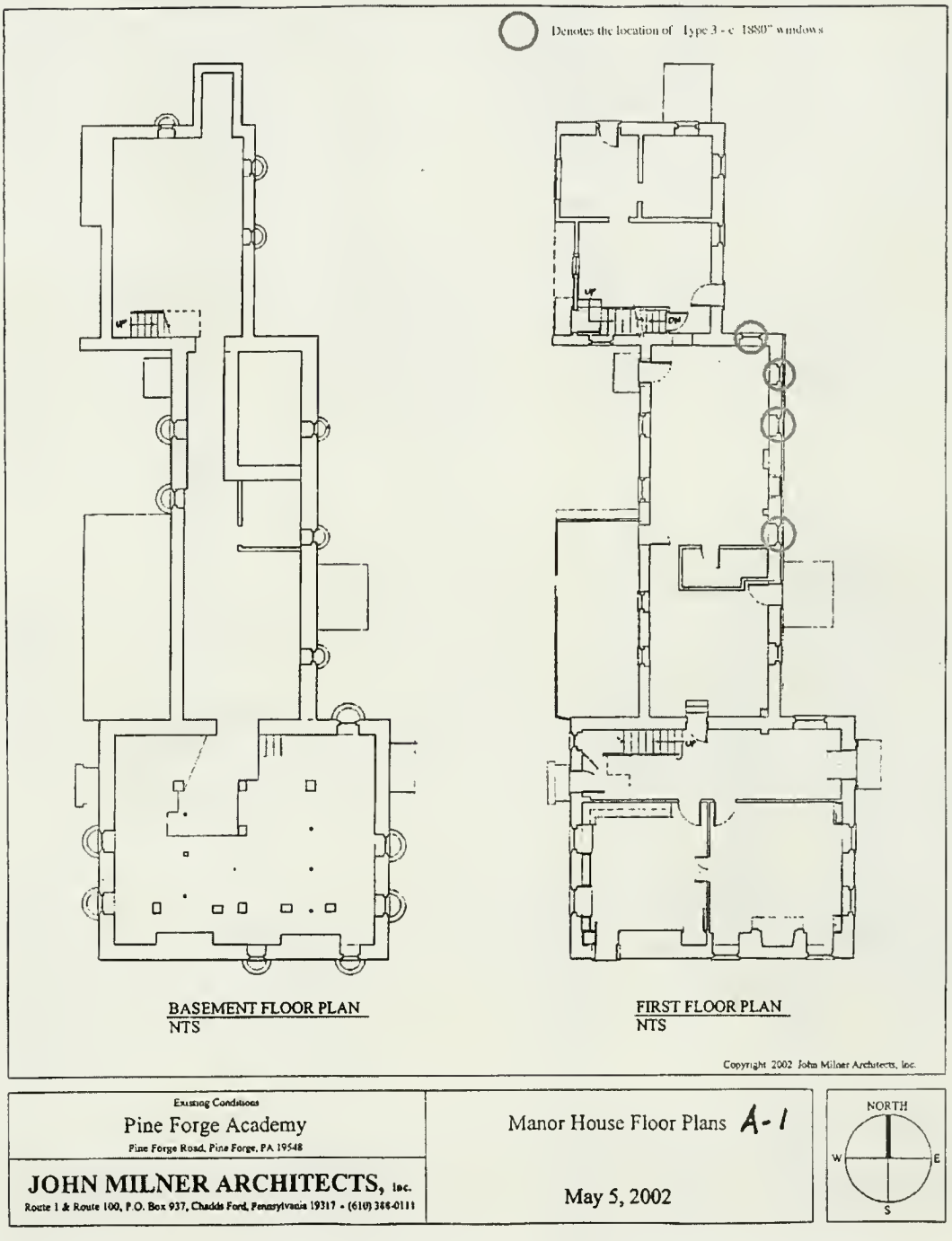

Figure B-3 The locations of the "Type 3 – c. 1880" windows are highlighted

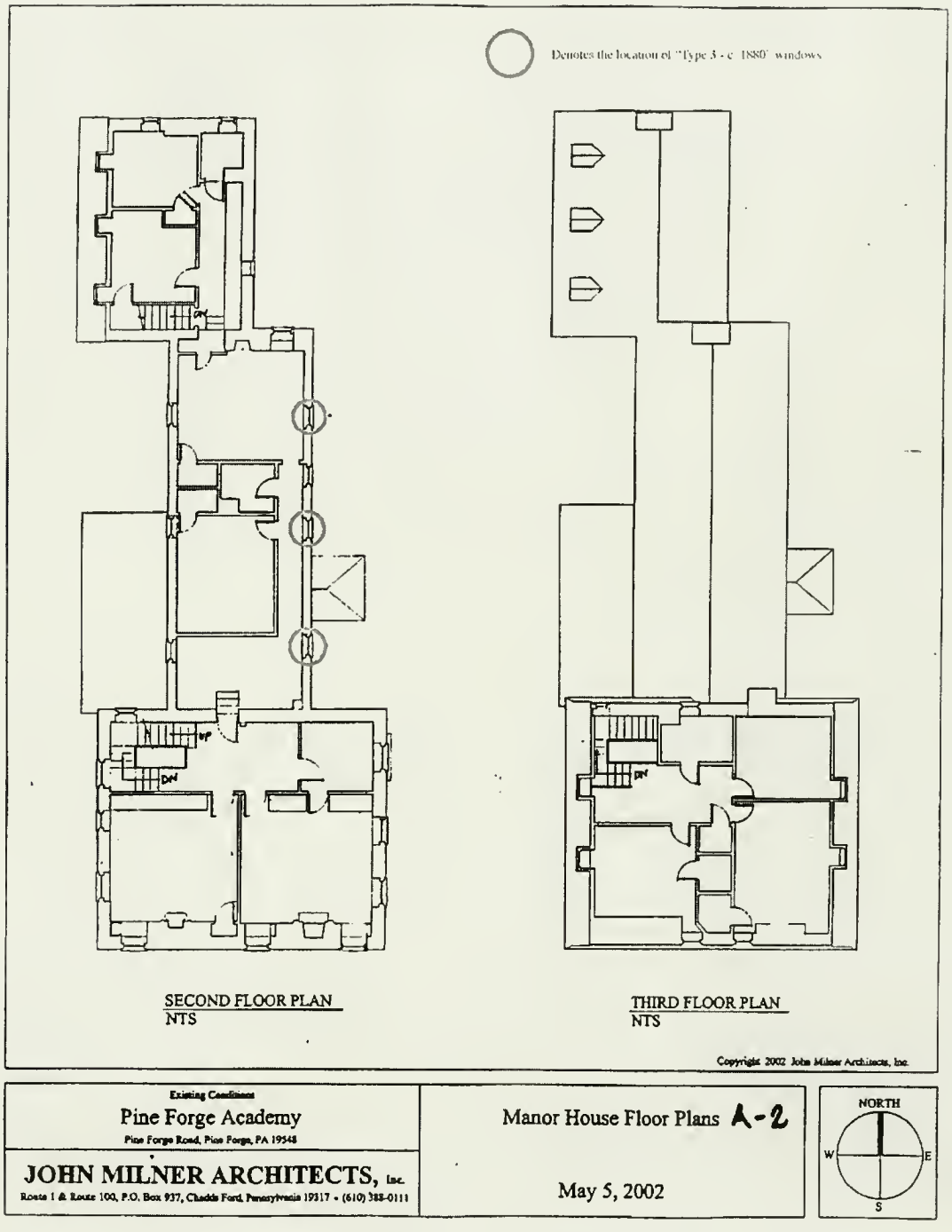

Figure B-4 The locations of the "Type 3 – c. 1880" windows are highlighted

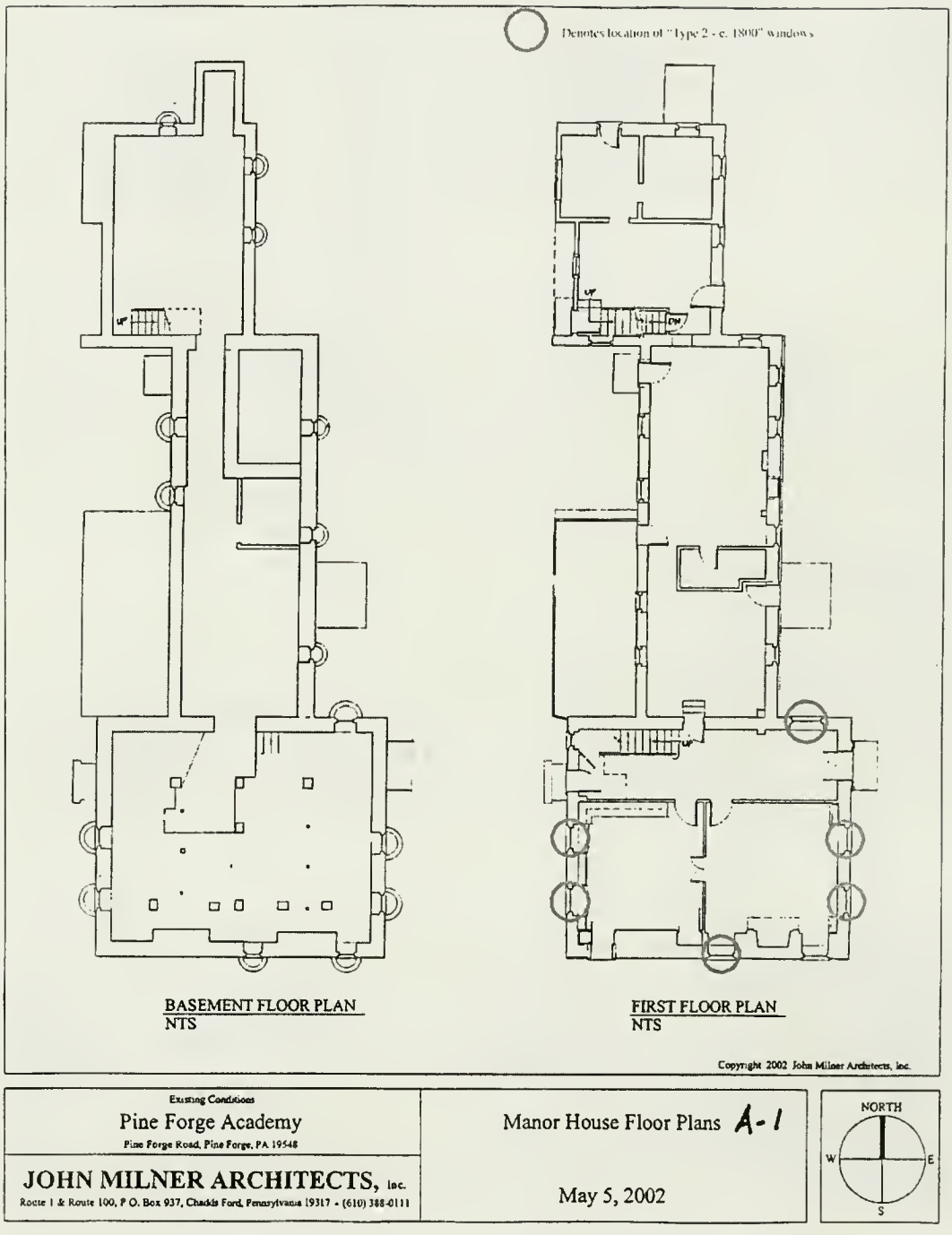

Figure B-5 The locations of the "Type 2 – c. 1800" windows are highlighted

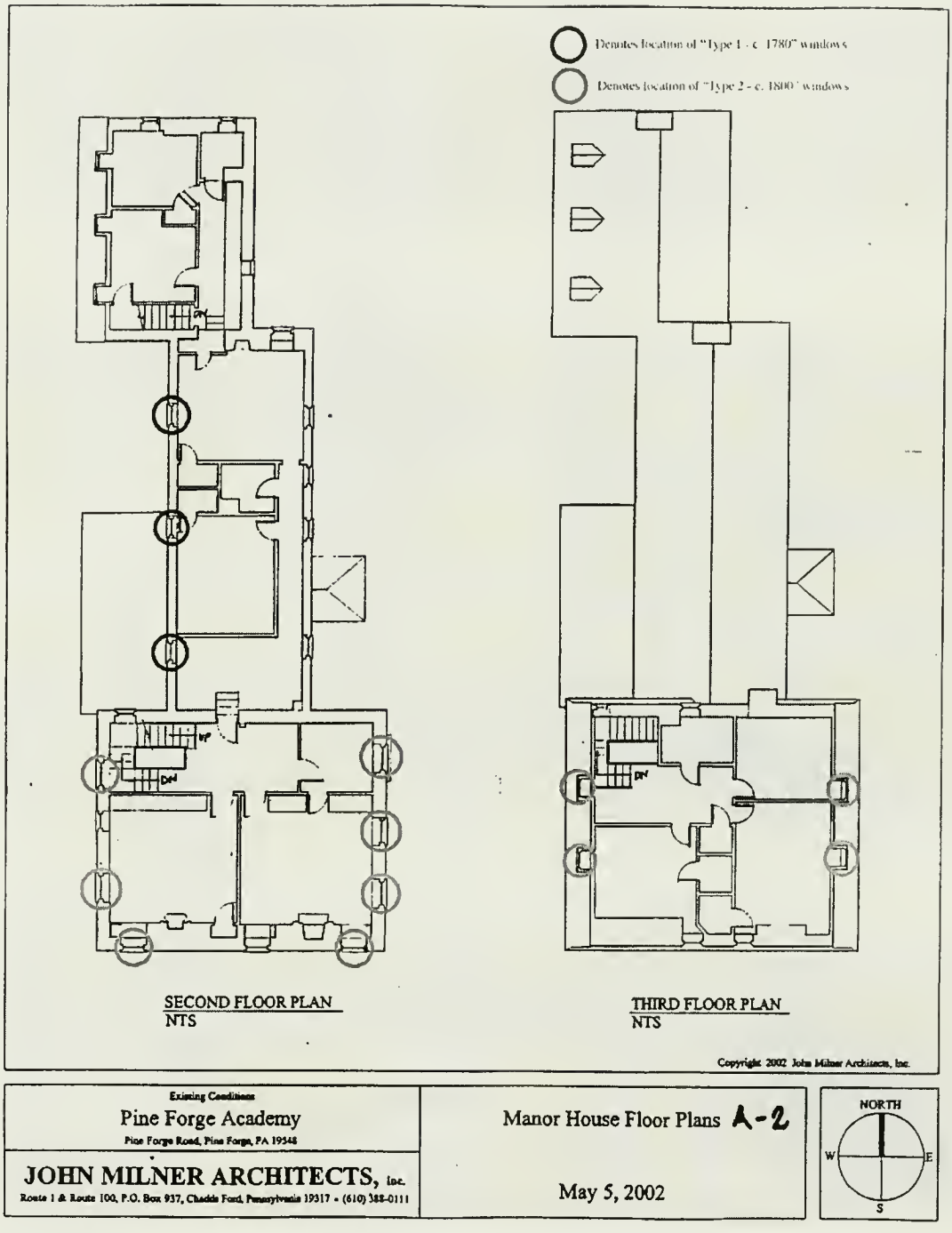

Figure B-6 The locations of the "Type 2 – c. 1800" and "Type 1 – c. 1780" windows are highlighted

Appendix C: Historic Maps and Land Surveys

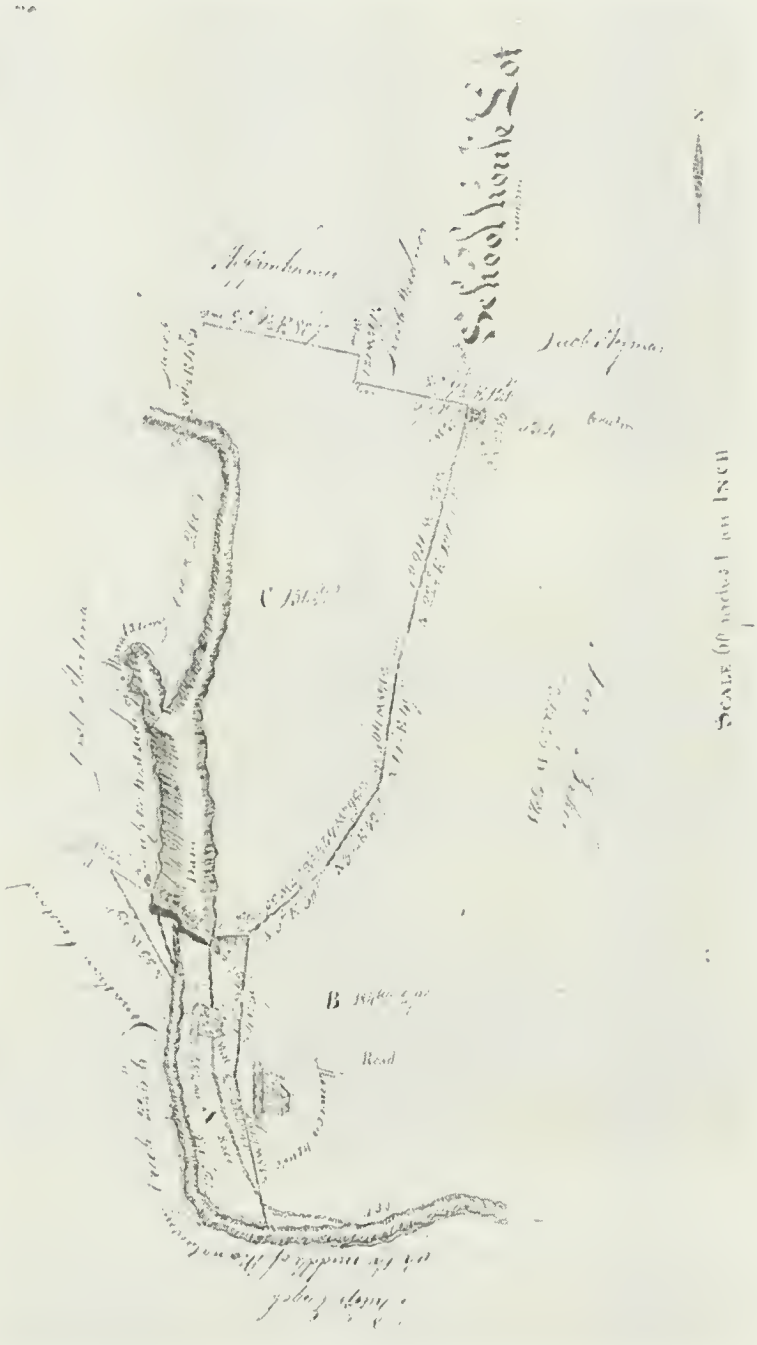

Figure C-1 Survey of the Property of David Rutter, 1817

Figure C-2 Survey of Pine Forge Iron Plantation, 1821

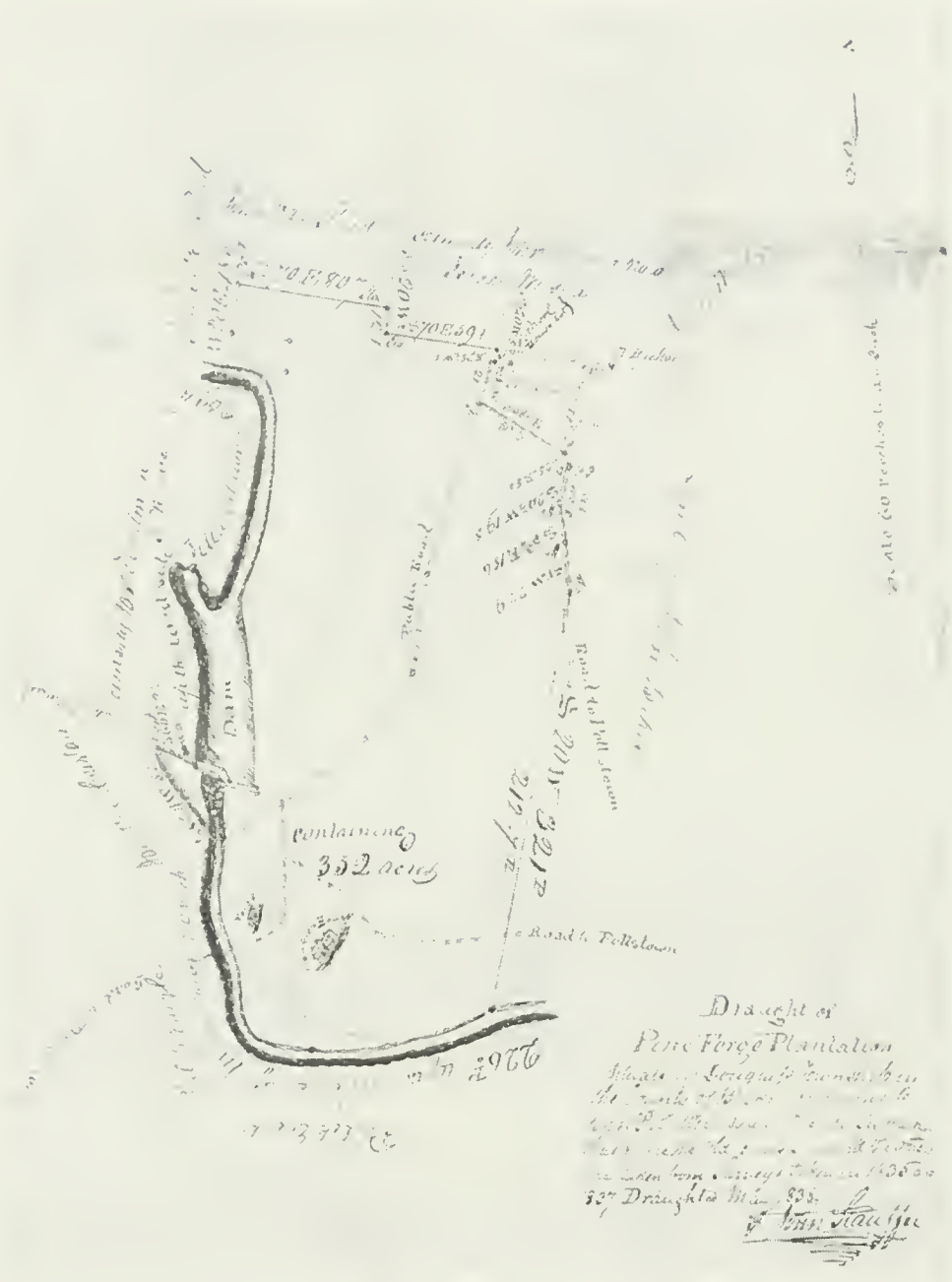

Figure C-3 Survey of Pine Forge Plantation, 1838

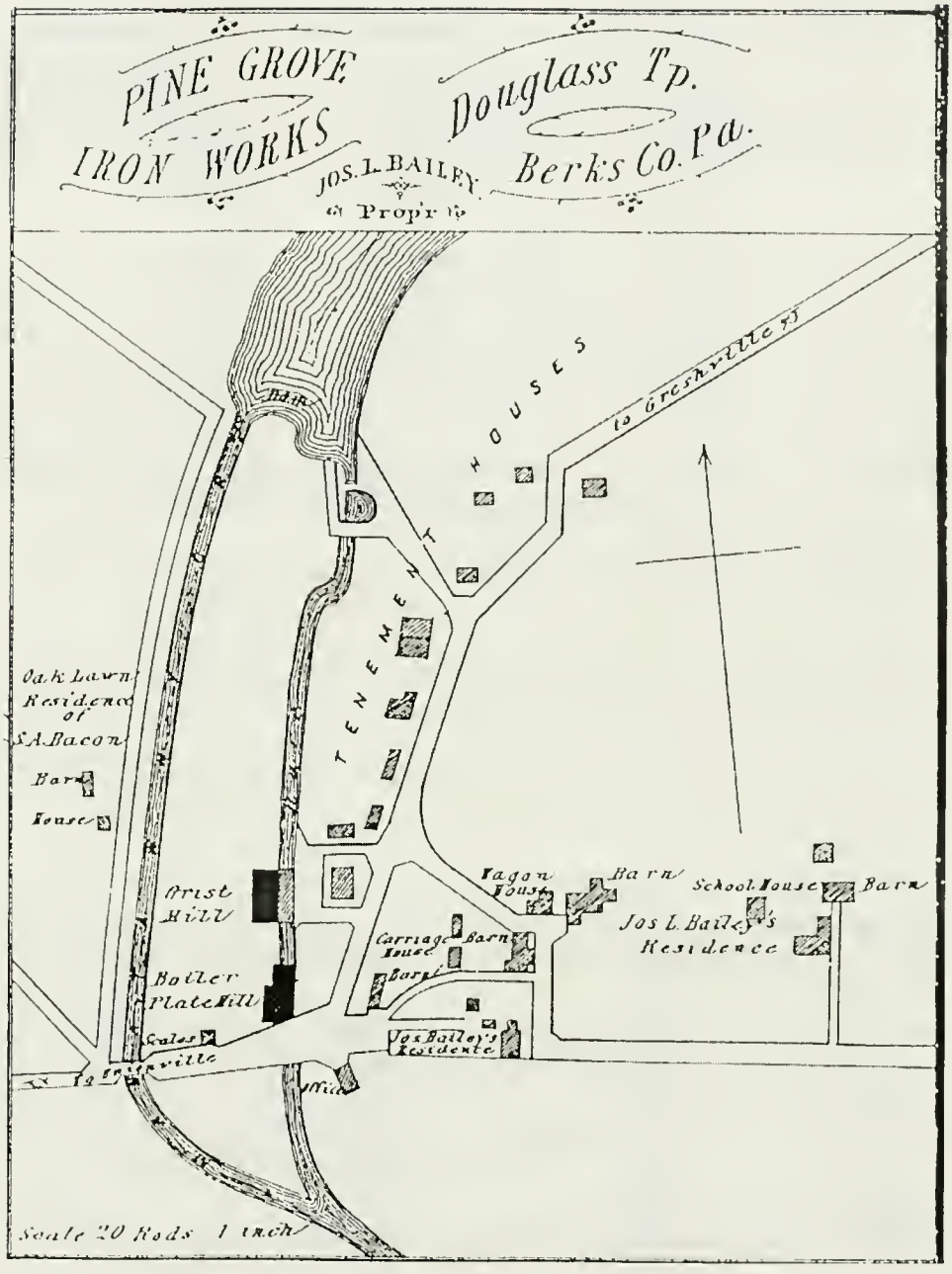

Figure C-4 Map of Pine Grove [Forge] Ironworks, 1876

Bibliography

Primary Sources

Author Unknown. Flyer advertising sale of Pine Forge and Farm. No date. *Pennsylvania Magazine of History and Biography* 43 (1921): 191.

Berks County Deed Books, 1750 – Present. Berks County Recorder of Deeds, Reading, Pennsylvania.

Berks County Orphans' Court Records, 1750 – Present. Berks County Register of Wills, Reading, Pennsylvania.

Berks County Will, Estate, and Estate Administration Records, 1750 – Present. Berks County Register of Wills, Reading, Pennsylvania.

Dickinson, Jonathan. Letter Book, 1715-1721. Historical Society of Pennsylvania, Philadelphia, Pennsylvania.

Evans, Griffith. Papers, 1786-1848. Historical Society of Pennsylvania, Philadelphia, Pennsylvania.

Federal Census Records. The National Archives Mid-Atlantic Office, Philadelphia, Pennsylvania.

Pennsylvania Gazette, 1728-1775. The CD-ROM edition of the *Gazette*, 1728-1765, created by Accessible Archives, Inc. of Malvern, Pennsylvania. It is compiled on two folios (1728-1750 and 1751-1765) and available for use at many major libraries.

Philadelphia County and Berks County Census Records, 1790 – 1930. National Archives Mid-Atlantic Office, Philadelphia, Pennsylvania.

Philadelphia County Warrants, Patents, and Deed Books, 1681 – 1750. Philadelphia City Archives, Philadelphia, Pennsylvania.

Philadelphia County Wills, Estate, and Estate Administration Records, 1681 – 1750. Philadelphia City Archives, Philadelphia, Pennsylvania.

Pine Forge Ledger Books, 1720-1740. Historical Society of Pennsylvania, Philadelphia, Pennsylvania.

Pine Forge Ledger Books, 1748-1869. Pine Forge Academy, Pine Forge, Pennsylvania.

Richardson Brognard Okie Collection, ca. 1787-1978, MG-303, Pennsylvania State Archives. Architectural Drawings for William McM. Rutter, 1917, Correspondence

from Mrs. Wm. Rutter, 1917, 1928-30, and Photographs, Maj. Wm. McM. Rutter, Pine Forge, PA.

Rutter, John P. Correspondence. Society Collection. Historical Society of Pennsylvania, Philadelphia, Pennsylvania.

Rutter, Thomas. Last Will and Testament, March 5, 1795. Historical Society of Pennsylvania, Philadelphia, Pennsylvania.

Whitacre, M. Elizabeth. "A Vignette of Pine." In *Pioneers Along the Manatawny* by W. E. Claussen. Boyertown, Pennsylvania: Gilbert Printing Company, Inc., 1968.

Secondary Sources

Bezfs-Selfa, John. "Slavery and the Disciplining of Free Labor in the Colonial Mid-Atlantic Iron Industry." *Pennsylvania History* 64 (Summer, 1997): 271-286.

Bining, Arthur Cecil. *Pennsylvania Iron Manufacture in the Eighteenth Century*. Harrisburg, Pennsylvania: The Pennsylvania Historical Commission, 1938.

Claussen, W. E. *Pioneers Along the Manatawny*. Boyertown, Pennsylvania: Gilbert Printing Company, Inc., 1968.

Committee on Historical Research. *Forges and Furnaces in the Province of Pennsylvania.* Philadelphia: Pennsylvania Society of the Colonial Dames of America, 1914.

Croll, Rev. P.C. "Annals of the Oley Valley in Berks County, Pennsylvania: Over Two Hundred Years of Local History of an American Canaan." *Reading Eagle Press* (Reading, Pennsylvania), 1926.

Eberlein, Harold Donaldson and Cortlandt Van Dyke Hubbard. *Colonial Interiors: Federal and Greek Revival, Third Series*. New York: William Helbern, Inc., 1938.

Eggert, Gerald G. *The Iron Industry in Pennsylvania.* Harrisburg, Pennsylvania: The Pennsylvania Historical Association, Pennsylvania History Studies No. 25, 1994.

Garret, Elizabeth D. *At Home*. New York: Harry N. Abras, 1990.

Graham, Daniel A. "Good Business Practices and Astute Matchmaking: The Ascendancy of Thomas Potts (c1680-1752) of Berks County Pennsylvania in the Early Charcoal Iron Industry of Pennsylvania." Not Published. Photocopy. 1997.

_____. "Pennsylvania's First Iron Work: Rutter's Bloomery, 1716-1720." Not published. Photocopy. 1992.

_____. "Thomas Rutter I (c1660-1730) of Germantown, Pennsylvania and the Birth of the Pennsylvania Iron Industry." Not Published. Photocopy. 1996.

_____. "Rutter Family: Member of the Pennsylvania Assembly 1727, 28, 29 Thomas Rutter Jr. (1690-1734) of Philadelphia." Not Published. Photocopy. 1994.

_____. "Rutter Family: Thomas Rutter III (1732-1795) and Martha Potts (1740-1804) of Eastern Pennsylvania." Not Published. Photocopy. 1993.

Hunter, Kathleen. "A Commitment to Education: Designing a Heritage-Education Center for the National Trust: A Final Report." *Historic Preservation Forum* 6, no. 1 (January/February 1992): 15-20.

James, Mrs. Thomas Potts. *Memorial of Thomas Potts, Jr.* Cambridge, Massachusetts: Privately Printed, 1874.

Lambert, Cathleen Ann. "Heritage Education in the Postmodern Curriculum." Master's thesis, University of Pennsylvania, 1996.

Leach, Josiah Granville. *Chronicle of the Yerkes Family with Notes on the Leach and Rutter Families*. Philadelphia: Printed for Private Circulation by J. B. Lippincott, Co., 1904.

Lewis, W. David. *Iron and Steel in America*. Greenville, Delaware: The Hagley Museum, 1976.

Illustrated Historical Atlas of Berks County. Reading, Pennsylvania: Reading Publishing House, 1876.

McCurdy, Linda. "The Potts Family Iron Industry in the Schuylkill Valley." Pennsylvania State University, Ph.D. Diss., 1974.

Montgomery, Morton L. *History of Berks County in Pennsylvania*. Philadelphia: Everts, Peck & Richards, 1886.

National Register Multiple Property Nomination. "Iron and Steel Resources of Pennsylvania, 1716-1945." Harrisburg, Pennsylvania. Bureau of Historic Preservation, Pennsylvania Historical and Museum Commission.

Nelson, Lee H. *Nail Chronology As An Aid to Dating Old Buildings*. American Association for State and Local History Technical Leaflet 48: History News, Volume 24, No. 11, November 1968.

Nolan, J. Bennet, ed. *Southeastern Pennsylvania: A History of Berks, Bucks, Chester, Delaware, Montgomery, Philadelphia and Schuylkill, Volume 1*. New York: Lewis Historical Publishing Co., Inc., 1943.

Pendleton, Philip E. *Oley Valley Heritage: The Colonial Years, 1700-1775.* Birdsboro, Pennsylvania: The Pennsylvania German Society, 1994.

"Pine Forge Historical Review." *Official Newsletter of the Pine Forge Academy Historical Society* 1, no. 1 (May 2001).

Price, C. Matlack. "A Modern Version of the Early Pennsylvania Country House: Residence of William T. Harris" *The Architectural Record* 37 (January 1915): 79-81.

Raymond, Eleanor. *Early Domestic Architecture of Pennsylvania.* New York: William Helbern, Inc., 1931.

Reinberger, Mark. "Graeme Park and the Three-Cell Plan: A Lost Type in Colonial Architecture." In *Perspectives in Vernacular Architecture, Volume IV.* Thomas Carter and Bernard L. Herman, editors. Columbia, Missouri: University of Missouri Press, 1991: 146-154, 230-232.

Rupp, Daniel I. *History of the Counties of Berks and Lebanon.* 1844. Reprint, Spartanburg, South Carolina: The Reprint Company, 1984.

Senseman, Ronald S., Leon Brown, Edwin Bateman Morris, and Charles T. Okie, *The Residential Architecture of Richardson Brognard Okie of Philadelphia* (n.p., n.d.).

Smedley, F.C. *History of the Underground Railroad in Chester and the Neighboring Counties of Pennsylvania.* 1883. Reprint, New York: Greenwood Publishing Corp., Negro University Press, 1968.

Swank, James M. *History of the Manufacture of Iron in All Ages.* Philadelphia: Published by the Author, 1884.

Tatum, Sandra L. and Roger W. Moss. *Biographical Dictionary of Philadelphia Architects, 1700-1930.* Boston: G.K. Hall, 1985.

Walker, Joseph E. "Negro Labor in the Charcoal Iron Industry of Southeastern Pennsylvania." *The Pennsylvania Magazine of History and Biography.* XCIII (1969): 466-486.

Wokeck, Marianne S., Joy Wiltenburg, Alison Duncan Hirsch, and Craig W. Horle, editors. *The Papers of William Penn, Volume III, 1685-1700.* Philadelphia: University of Pennsylvania Press, 1986.

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